Davy

A

MODERN SYSTEM

OF

NATURAL HISTORY.

CONTAINING

Accurate Deſcriptions, and faithful Hiſtories,

OF

ANIMALS, VEGETABLES, and MINERALS.

Together with

Their Properties, and various Uſes in MEDICINE, MECHANICS, MANUFACTURES, &c.

Illuſtrated

With a great Variety of COPPER-PLATES, accurately drawn from Nature, and beautifully engraved.

By the Rev. SAMUEL WARD,
Vicar of Cotterſtock, cum Glapthorne, Northamptonſhire; and oth rs.

VOL. III.

The great Creator did not beſtow ſo much Curioſity and Workmanſhip upon his Creatures to be looked upon with a careleſs incurious Eye.

Derham's Phyſ. Theol Book xi.

LONDON:
Printed for F NEWBERY, the Corner of St. Paul's Church-yard, Ludgate-ſtreet, 1775.

BRITISH
MUSEUM

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OF

NATURAL HISTORY.

THE FOX.

THE fox exactly reſembles the wolf and the dog internally, and is a crafty, lively, and libidinous animal. It breeds but once in a year, except ſome accident happens to its firſt litter, and generally brings forth four or five cubs, which, like puppies, are produced blind. The female goes with young about ſix weeks. It has been a common received opinion that this animal would produce with the dog kind, but late experiments prove it to be erroneous, and convince us that this animal will mix only with its own ſpecies *.

* Buffon's Hiſt. Naturelle, VII. 81.

The fox is ſmaller and ſlenderer than the wolf; the former being about two feet three inches long, and the latter three feet and an half. The tail of the fox is longer in proportion, and more buſhy; its noſe is ſmaller, and more nearly reſembles that of a greyhound, and its hair is ſofter. Like the wolf, its eyes are obliquely ſituated; its ears are directed in the ſame manner as thoſe of the wolf, and, in proportion to its ſize, its head is equally large.

The fox has ever been famous for his cunning and his arts; and he appears to merit the reputation he has gained. Of all animals, he has the moſt ſignificant eye, by which he expreſſes every paſſion of love, fear, hatred, &c. He is remarkably playful, but, like other ſavage creatures half reclaimed, he will, on the leaſt offence, bite thoſe with whom he is moſt familiar. He is greatly delighted with his own buſhy tail, with which he often amuſes and exerciſes himſelf, by running in circles to catch it; and, in cold weather, he wraps it round his noſe.

This animal generally keeps his kennel at the edge of a wood, and yet within

within an eaſy journey of ſome farm-houſe. From thence he liſtens to the crowing of the cock, and the cackling of the hen and chickens. He ſcents them at a diſtance; he ſeizes every opportunity, conceals his approaches, creeps ſlily along, attacks his prey, and ſeldom returns without his booty. When he has acquired a larger prey than he can immediately devour, he carries off a part of the ſpoil, conceals it at ſome convenient diſtance, and again returns to the charge. In this manner will he bring them one by one, and thruſt them into the earth with his noſe: afterwards, at his leiſure, he more completely hides them by ramming the looſe earth on them, till the calls of hunger incite him to pay them another viſit. When this animal obſerves any ſpringes for catching birds, he takes care to be before-hand with the fowler, and if he finds any fowls entangled in the ſnare, he very expertly takes them out. He alſo finds out birds-neſts, ſeizes the partridge and the quail while ſitting, and deſtroys large quantities of game. He will feed on fleſh of any kind, but his favourite food is lambs, rabbits, hares,

poultry, and feathered game. When urged by hunger, he will eat carrots and inſects; and, if near the ſea-coaſts, will eat ſhrimps, crabs, and other ſhell-fiſh. In vain does the poor hedge-hog roll itſelf up into a ball to oppoſe him; he teaſes it till it is obliged to uncover itſelf, and then he devours it. In France and Italy the fox does incredible damage in the vineyards, by feeding on the grapes, of which he is very fond.

The chace of the fox requires leſs preparation than that of the wolf, and is more pleaſant and amuſing. The dogs have no great delight in purſuing the wolf, but they are extremely alert in following the fox, which chace they prefer to that of the hare or buck. For every part of this chace, the huntſmen have their cant terms. The firſt year the fox is called a cub, the ſecond, a fox, and the third, an old fox. His tail is called the bruſh or drag. He is generally purſued by a large kind of harrier or hound, aſſiſted by a ſmaller breed called terriers, that follow him into his kennel, and attack him there. As ſoon as the fox diſcovers that he is purſued, he makes to his kennel;

kennel, and takes refuge at the bottom of it; where, for a moment, he loſes the cry of his enemies; but the whole pack preſently ſurround the mouth of his retreat; where their vehemence and rage redouble, and the little terrier courageouſly ventures in. Sometimes the kennel is under a rock, or among the roots of old trees; in ſuch caſes the fox cannot be dug out, nor can the terrier contend with him at the bottom of his hole: but, when he can be dug out, he is uſually carried in a bag to ſome open country, and there ſet looſe before the hounds. The fox leaves a ſtrong ſcent, which always keeps up a full cry, and adds to the entertainment.

The ſmell of this animal is indeed very ſtrong, but that of the urine is moſt remarkably fœtid. It is ſo offenſive to itſelf, that it will take the trouble of digging a hole in the ground, and there, after depoſiting its water, cover it over with the earth. It is ſaid the fox makes uſe of its urine to force the cleanly badger from its habitation. Upon the truth of this aſſertion I will not inſiſt; but it is certain that the fox makes uſe of the badger's kennel: not

on

on account of its being unable to form its own retreat; but to ſave itſelf ſome trouble: for after the expulſion of the firſt inhabitant, the fox greatly enlarges and improves it; making the addition of ſeveral chambers, and providentially contriving ſeveral avenues to ſecure a retreat from every quarter.

There are only three varieties of foxes in this iſland, which differ from each other in ſize, but not in form or colour. The greyhound fox is the largeſt, talleſt, and boldeſt, and will even attack a grown ſheep: the maſtiff-fox is leſs: the cur-fox is the leaſt, though the moſt pernicious of the three to the peaſant and the farmer; and is continually lurking about out-houſes, barns, &c.

In the colder countries round the pole, foxes are found of all colours; black, blue, grey, iron-grey, ſilver-grey, white, white with red legs, white with black legs, white with the point of the tail black, red with the throat and belly white, and with a ſtripe of black extending the whole length of the back, and another ſtripe croſſing it at the ſhoulders. The common fox, however, is more univerſally diffuſed than any of the former. It inhabits

Europe;

Europe; the cold and temperate parts of Aſia; Barbary, but not the hotter parts of Africa; it abounds in North-America; and is alſo to be found in South-America. They have the ſame cunning diſpoſition in all countries, and the ſame eagerneſs after prey. They commit the ſame ravages among game, birds, poultry, and the leſſer quadrupeds. Their voice is a kind of yelp, and not a bark; and their bite, like that of the wolf, is very hard and dangerous. Their colour, in general, is a kind of a tawny red, mixed with aſh-colour; but in this particular they greatly vary. The fur of the white fox is not much eſteemed, becauſe the hair falls off; the blue fox ſkins are ſcarce, and are therefore bought up with great avidity; but the black fox ſkin is held in the greateſt eſtimation, and is ſold at a very high price. Theſe ſkins are frequently made into muffs, and are extremely warm and beautiful.

The Brant fox, deſcribed by Geſner and Linnæus, is of a fiery redneſs. Mr. Brook received one of theſe from Penſylvania, which was not above half the ſize of the common fox.

The

The grey fox inhabits Carolina, and the warmer parts of North-America. It agrees with the common fox in form; but never burroughs. It affords but little diverſion to the ſportſman, but takes to its retreat after about a mile's chace. It feeds on poultry, birds, &c. and has no ſtrong ſmell. It is eaſily tamed.

The ſilvery fox, or renard argente *, reſembles the common fox in form, and is found in great plenty in Louiſiana. They have a beautiful coat; having long ſilvery hair ſpringing over ſhort brown hair, which gives them a very elegant appearance. As they live in foreſts which abound with game, they never attack poultry.

The fox is very prejudicial to the huſbandman, by taking away, and deſtroying his lambs, poultry, geeſe, &c. eſpecially in places that are near foreſt-woods, and covert places. The beſt way of deſtroying them, ſays Mr. Mortimer, is with guns or traps, in the following manner: if you intend to ſhoot them, procure a ſheep's paunch, and tying it to a long ſtick, rub your ſhoes

* Charlevois Nouv. France, V. 196.

well

well upon it, that the fox may have no ſcent of your feet, and draw the paunch after you, with which make a trail a mile or two in length; and order it ſo as to bring it near ſome thick-headed tree. At which place, when you have made your trail, leave the paunch, and with your gun get up into the tree; and as ſoon as it begins to be dark, you will ſee him come by you upon the ſcent of the trail, where you may ſhoot him. Obſerve that you draw the trail to windward of the tree, if you can.

But if you mean to catch them with a ſteel-trap, which is the ſureſt method, chooſe a place to ſet it in a plain part of a large field; let it be out of the way of all paths, but not near either a hedge or any ſhelter. Open your trap, and lay it upon the ground, and cut out in the turf juſt the exact form of it, and take out ſo much earth as may make room to lay it, covering it again very neatly with the turf you cut out; and, if the joints of the turf will not cloſe exactly, get ſome of the fine mould that is to be found in a new caſt-up mole-hill, and fill the joints with it, taking ſome graſs, and ſticking it in the mould,

mould, as if it grew there. Make all ſo fine and plain, as that it may deceive your own eye to look upon it. About eight or ten yards from the trap, three ſeveral ways, ſcatter ſome of the fine mould that you had out of the mole-hill, very thin upon a place about fourteen or fifteen inches ſquare; and upon theſe places, and where the trap is, lay two or three ſmall bits of cheeſe, and with a ſheep's paunch, as before directed, draw a trail of about a mile long to each of the three places, that are at a diſtance from the trap, and from thence to the trap, that the fox may come upon one of thoſe places firſt, which will make him approach the trap with more boldneſs, where you will ſeldom fail of him; but you muſt obſerve not to faſten your trap, but to leave it looſe, that the fox may draw it to the hedge-ſide, or to ſome cover, or he will bite off his leg, and be gone.

Some bend down a ſtick in the wood, and ſet a trap for them in their paths, like that which is ſet for woodcocks, which hangs them up, or any other ſort of vermin *.

* Mortimer's Huſbandry, vol. I. page 312.

THE

THE JACKALL.

THE jackall is vulgarly called the lion's provider, from an opinion that it rouſes the prey for that animal. The fact is, every creature in the foreſt is ſet in motion by the cries of the jackalls: the lion, and other beaſts of rapine, attend to the chace by a kind of inſtinct, and ſeize thoſe timid animals that betake themſelves to flight at the noiſe of this nightly pack. Though one of the moſt common among the wild animals in the Eaſt, there is ſcarce any leſs known in Europe, or more indifferently diſcribed by natural hiſtorians. It is ſaid to be of the ſize of a common fox, and reſembling that animal in the hinder parts, particularly the tail; and the wolf in the fore-parts, eſpecially in the noſe. Its legs are ſhorter than thoſe of the fox, and its colour of a bright yellow. The jackall ſeems to be placed between the wolf and the dog; it appears to have the ferocity of the wolf, and the familiarity of the dog. Its cry is between barking and howling, and is a lamentation reſembling that of human diſtreſs. In

its purſuits it is more noiſy than the dog, and more voracious than the wolf. It is an inhabitant of all the hot and temperate parts of Aſia, and is found in Barbary, and other parts of Africa, as low as the Cape of Good-Hope. The jackall never goes alone, but always in packs of forty, fifty, or even two hundred together, and they hunt like hounds in full cry from evening till morning *. Nothing can eſcape them: they make even the ſmalleſt animals their prey; and yet, when thus united, have the courage to face the largeſt: they deſtroy the flocks and poultry, ravage villages and gardens, and even deſtroy children that are unprotected. When they cannot obtain living prey, they will feed on roots, fruits, and carrion. They will greedily rake up the dead from their ſilent graves, and feed on the putrid corpſes; for which reaſon, in many countries, bodies are interred a great depth, and well ſecured againſt their attacks. They are conſtant attendants upon caravans, and armies, expecting that death will furniſh them a banquet. Their howling is loud and dreadful. In the day time

* Balon Obſ. 163.

they

they are ſilent, and retire to their dens; and, we are informed by Dallon, that, notwithſtanding their natural ferocity, they are ſometimes tamed, and kept among domeſtic animals.

Linnæus mentions an animal of this kind about the ſize of a large cat, inhabiting Surinam; with the tongue fringed on the ſides, and with warts on the cheeks, above the eyes, and under the throat: the colour of the upper-part of the body greyiſh, and the lower white: it has five toes before, and four behind. It is mentioned by no other naturaliſt except Linnæus.

THE ISATIS.

THE hair of the iſatis is ſofter than that of a common fox. Some of theſe animals are found blue; ſome are white at one ſeaſon of the year, and brown at another. Their hair is much longer in winter than in ſummer, which is uſual with animals of cold climates. The iſatis is very common in all the northern countries bordering upon the icy ſea; and is ſeldom ſeen but in the coldeſt countries. It is principally found in the mountains and naked

regions of Norway, Siberia, and Lapland. In the form of its body, and the length of its tail it reſembles a fox; but is more like the dog in the ſhape of its head, and the poſition of its eyes. Theſe animals live in the cliffs of rocks, not being able to burrow on account of the froſt; and two or three pair generally inhabit the ſame hole. They bark like the dog and go nine weeks with young. They have all the cunning of the common fox; and prey on the young of geeſe, ducks, and other water fowl, before they can fly. In Greenland, neceſſity obliges them to feed on berries, ſhell-fiſh, or any thing the ſea caſts up; but their principal food in the north of Aſia, and in Lapland, is the Leming, or Lapland marmot. The Leming is a very wandering animal, and the iſatis will deſert the country three or four years in purſuit of them. Unleſs this animal is killed in the winter, the fur is of no value.

THE HYÆNA.

THE hyæna is nearly of the ſize of a wolf, and reſembles that animal in the ſhape

ſhape of its head and body: the head, however, is a little broader, and leſs pointed, and the ears are longer. The hair on the body is long, coarſe, and rough, and of an aſh-colour; marked with long black ſtripes from the back downwards. Its tail is very full of hair; ſometimes plain, and ſometimes barred with black. It is more ſavage and more untametable than any other quadruped, and is continually in a ſtate of rage or rapacity; for ever growling, except when it is receiving its food. Its eyes then gliſten, the briſtles on its back ſtand erect, and its teeth appear, which altogether give it a moſt dreadful aſpect; and the terror is heightened by its horrible howl, which, it is ſaid, is ſometimes miſtaken for that of a human voice in diſtreſs. The hyæna, for its ſize, is the moſt ferocious, and the moſt terrible of all other quadrupeds; and its courage is equal to its ferocity: it defends itſelf againſt the lion, is a match for the panther, and frequently overcomes the ounce. It is an obſcure and ſolitary animal, and chiefly inhabits Aſiatic Turkey, Syria, Perſia, and Barbary. It reſides in the caverns of mountains, in the clifts of

rocks, or in dens under ground, which it has formed for itſelf. Like the jackall, it violates the repoſitories of the dead, and greedily devours the putrid contents of the grave: like it too, it preys upon the flocks and herds; and when deſtitute of other food, will eat the roots of plants, and the tender ſhoots of the palms. The ſuperſtitious Arabs, when they kill a hyæna, carefully bury the head, leſt it ſhould be applied to magical purpoſes, as the neck was of old by the Theſſalian ſorcereſs. It is indeed no wonder that an ignorant Arab ſhould attribute to its remains preternatural powers, when even the antients believed that it changed its ſex, and that it had the power of charming the ſhepherds, and, as it were, rivetting them to the place on which they ſtood. This animal is ſo cruel, fierce, and malevolent, that, even when taken very young, it cannot poſſibly be tamed: it lives by depredation, and ravages with inſatiable voracity. The voice of this animal is a hoarſe diſagreeable mixture of growling and roaring.

There is an animal of this kind, inhabiting Guinea, Ethiopia, and the Cape,

Cape, the colour of which is a reddiſh brown, marked with diſtinct round black ſpots; and is called by Mr. Pennant, the ſpotted hyæna.

ANIMALS OF THE CAT KIND.

THE claſs of the cat kind are principally diſtinguiſhed by their ſharp and formidable claws, which they can extend and conceal at pleaſure. They lead a ſolitary ravenous life; for moſt of theſe ferocious tribe ſeek their food alone; and, except at certain ſeaſons, are even enemies to each other. The dog, the wolf, and the bear, will ſometimes live upon vegetable food; but the lion, the tiger, the leopard, and all of the cat kind, feed only upon fleſh.

Theſe animals are, in general, fierce, rapacious, ſubtle, and cruel; and even unfit for ſociety among each other. It is probable, notwithſtanding, that the fierceſt might be rendered domeſtic; but the experiment would be attended with too much trouble. The chariots of conquerors have been drawn by lions, and tigers have tended thoſe herds which they now deſtroy.

All

All animals of the cat kind are nearly allied to each other, though differing in ſize or in colour: they are equally fierce, artful, and rapacious; and he that has ſeen one has ſeen them all. In other creatures many changes are wrought by human aſſiduity; but all of this kind are inflexible in their forms, and wear the impreſſion of their natural wildneſs ſtrong upon them. The dog, the cow, or the ſheep, vary in different countries; but lions and tigers are every where the ſame: even the colour is nearly alike in all; and the ſlighteſt alterations give the animal a different denomination. The cat kind are remarkable for the ſharpneſs and ſtrength of their claws, which they thruſt from their ſheath when they ſeize their prey: they are alſo equally remarkable for the roundneſs of their head, the ſhortneſs of their ſnout, and the large whiſkers which grow on the upper-lip. They have alſo thirty teeth, which are very formidable; but are not ſo well calculated for chewing their prey as for tearing it. In the dog kind, the greateſt ſtrength lies in the under-jaw; but in theſe the principal force lies in the claws, which they can eaſily

extend,

extend, and their gripe is ſo powerful that nothing can open it. They have not the ſwiftneſs of moſt other animals; but generally catch their prey by ſurprize, inſtead of hunting it fairly down.

Notwithſtanding all theſe qualifications for ſlaughter, animals of the cat kind are cowardly and timid, and ſeldom make an attack at a diſadvantage: when the force againſt them is ſuperior, or even equal to their own, they have recourſe to flight.

THE CAT.

THIS animal has been taken under human protection, and is conſidered as a faithleſs friend, whoſe buſineſs it is to oppoſe an inſidious enemy. This is the only animal of the kind, whoſe ſervices can compenſate for the trouble of their education, and whoſe ſize is too inconſiderable to make its anger formidable. Though eaſily offended, and often capricious in its reſentments, it has not ſtrength ſufficient to do any conſiderable miſchief. There is nothing more playful than the kitten; but, in ſome degree, it loſes this diſpoſition as it

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it grows old, and its innate treachery is diſplayed. The cat has only the appearance of attachment: its timid approaches diſcover that it dreads its maſter or diſtruſts his kindneſs. The careſſes of the dog are ſincere; the cat often gains confidence only to abuſe it.

This animal is indeed an uſeful, but a deceitful domeſtic. It is active, neat, ſedate, delicate, and voluptuous: it delights in eaſe, and ſeeks the ſofteſt cuſhions to repoſe on. When pleaſed, it purrs and moves its tail; and, when angry, ſpits, hiſſes, and ſtrikes with its foot. Its eyes ſhine in the night; and its hair, when rubbed in the dark, emits fire. It is proverbially tenacious of life, and always lights on its feet.

The cat goes ſixty-ſix days with young, and uſually brings about five or ſix at a time, which are produced blind. For ſome weeks the female feeds them with her milk, and ſuch ſmall animals as ſhe can take by ſurprize, by which means they are early accuſtomed to rapine. Theſe animals engender when they are about a year old, and though they are remarkably ſalacious, they are very jarring lovers. They live to about the age of ten years.

All

All animals that are weaker than themſelves, are to them an object of deſtruction, and they do not always reject vegetables. Hares, rabbits, birds, rats and mice, bats, moles, toads, and frogs are all eagerly purſued, though they may not perhaps be equally acceptable; for the mouſe appears to be their favourite game. Nothing diſcovers the natural malignity of the cat, ſo much as the fondneſs for ſporting with their little captives before they kill them. Though the cat is a domeſtic animal, it cannot properly be called a dependant. Though perfectly tame, it acknowledges no obedience, and no art can force it to controul any of its inclinations. In general it is more attached to the houſe in which it reſides, than to its human inhabitants, and always remains there if the perſons who quit the houſe do not carry it with them; for they are never ſo ſtrongly attached to a maſter as to follow him out of the houſe: and, if it is carried elſe where, it ſeems for a while bewildered with its new ſituation. The cat is much afraid of water, of cold, and of diſagreeable ſmells. It delights in being near the fire, or in the ſun; is exceſſively

exceſſively fond of ſome plants, ſuch as marum, cat-mint, valerian, &c. and, when it finds them growing in any garden, it will rub itſelf againſt them till it wears them out. It is alſo fond of rubbing againſt thoſe perſons who carry perfumes.

The teeth of this animal being made rather for tearing than chewing its aliments, it eats ſlowly and with difficulty; and therefore it prefers the tendereſt food, particularly fiſh, which it eats as well boiled as raw. It does not ſleep ſoundly, and frequently pretends to be aſleep the better to deceive its prey. In walking it treads ſo ſoftly that it does not make the leaſt noiſe; and as to the offices of nature, it is remarkably cleanly. Linnæus ſays, the cat waſhes its face with its fore-feet at the approach of a ſtorm. Though this animal is the unaccountable antipathy of many, it is beloved by the Mahometans: and Maillet *, who expatiates largely on the beauty of Egyptian cats, adds, that the inhabitants build hoſpitals for them.

Cats, of all quadrupeds, were thoſe whoſe death was the moſt ſeverely puniſhed by the Egyptians, whether it

* Voy. l'Egypt. 30.

had

had been occaſioned through inadvertency, or on purpoſe; a perſon was equally criminal when he killed a cat, and that crime could only be expiated by the moſt cruel torments. But when the cat dies a natural death, ſays Herodotus, all the people of the houſe where that accident has happened, ſhave their eye-brows as a token of ſorrow. The cat is embalmed, and honourably interred. This veneration of the Egyptians for the cat, was founded on the current opinion among them, that Diana, to avoid the fury of the giants, had concealed herſelf under the figure of that animal. The god cat was repreſented ſometimes with its whole native form, and ſometimes with the body of a man, bearing a cat's head.

THE WILD CAT.

THE cat in its ſavage ſtate is much larger than the domeſtic cat; and its fur being longer, makes it appear larger than it really is. Its head is bigger, its face flatter, and its teeth and claws much more formidable. Being formed for rapine, its muſcles are very ſtrong: its tail, which is of a moderate length,

is very thick and flat, marked with alternate bars of black and white, the end always black: the general colour of theſe animals, in England, is a yellowiſh white, mixed with a deep grey; and the fur is very ſoft and fine. Theſe colours, upon cloſe inſpection, will be found to be diſpoſed like the ſtreaks on the ſkin of the tiger. This animal does not differ ſpecifically from the tame cat; the latter being originally of the ſame kind, but altered in colour, and ſome other trifling accidents, as are common to animals, which are reclaimed from the woods, and domeſticated. The wild cat is found in our larger woods; and is the moſt deſtructive of the carnivorous kinds in this kingdom. It lives moſtly in trees, and feeds only in the night. It multiplies as faſt as the domeſtic cat, and has been often known to breed with it. The wild cat was formerly reckoned among the beaſts of chace; as appears by a charter, granted by Richard the IId. to the abbot of Peterborough, permitting him to hunt the hare, fox, and wild cat: and it was the object of the ſportſman's diverſion in much earlier times. It is probable, however, that

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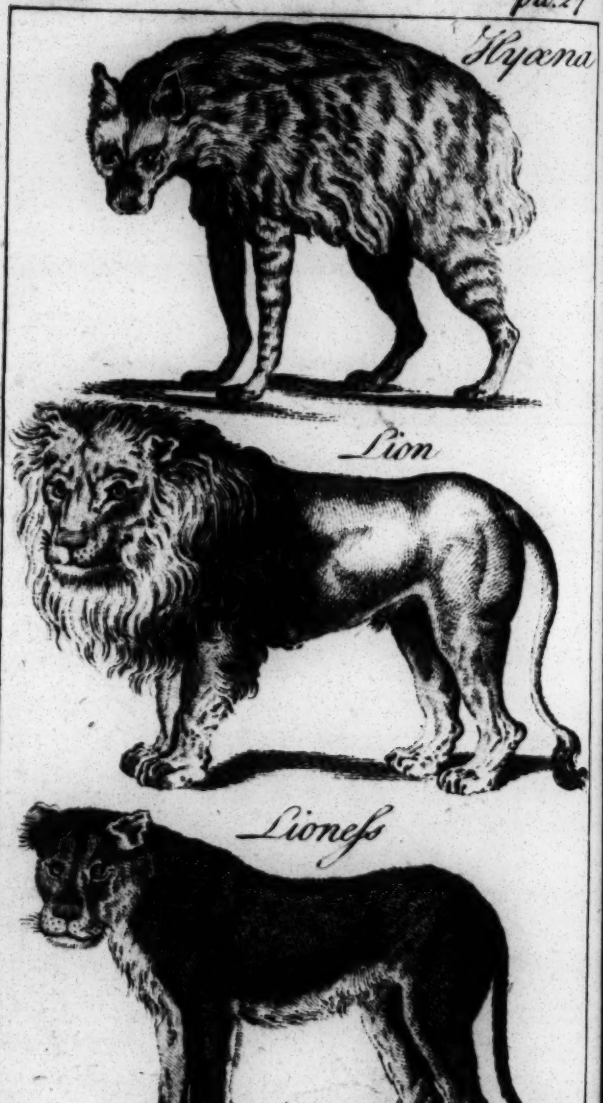
Hyæna
Lion
Lioness

theſe are not original inhabitants of this kingdom, but were firſt introduced in a domeſtic ſtate, and afterwards, by ill-uſage or neglect, became wild in the woods.

THE LION.

THIS animal has a large head, ſhort round ears, and a face covered with ſhort hair. On the upper-part of the head, the whole neck and ſhoulders, and the chin, are long ſhaggy hairs like a mane. The hair on the body and limbs is ſhort and ſmooth, and long at the bottom of the belly. It has very ſtrong limbs, and a long tail; with a tuft of long hair at the end. Its colour is tawny, but on the belly inclining to white. The length of the largeſt lion from the noſe to the tail is about eight feet; and the tail four feet. The lioneſs is leſs, and has no mane.

The influence of climate upon mankind is ſmall; he is found to ſubſiſt as well under the frozen poles, as beneath the torrid zone: but almoſt all other animals have their peculiar latitudes, beyond which they cannot live; either periſhing with a moderate cold, or ex-

piring for want of a frozen air, even in a temperate climate. The rein-deer never deſerts the icy-fields of the north; and the lion degenerates, when taken from beneath the line. Man is an inhabitant of the whole earth; but all inferior animals have their peculiar diſtrict. Terreſtrial animals are found larger, fiercer, and ſtronger in the warm, than in the cold and temperate climates. They are alſo more courageous and enterprizing; all their diſpoſitions ſeeming to partake of the ardour of their native ſoil.

The lion is an inhabitant of all parts of Africa; and the hotter regions of Aſia; ſuch as India and Perſia; and a few are ſtill to be found in the deſerts between Bagdat and Baſſorah, on the banks of the Euphrates; but they abound chiefly in the torrid zone, where their ſize is the largeſt, and their rage more tremendous; being enflamed by the influence of a burning ſun, on a moſt arid ſoil. The lions of mount Atlas, the tops of which are eternally covered with ſnow, have neither the ſtrength nor the ferocity of thoſe amidſt the ſcorched and deſolate deſerts of Zaara, or Biledulgerid. For in thoſe burning

burning deſerts, where rivers and fountains are denied, they live in a perpetual fever; a ſort of madneſs, fatal to every animal they meet with *. Happily, indeed, the ſpecies is not very numerous, and ſeems diminiſhing daily; as all modern travellers in theſe countries have aſſured us. Mr. Shaw obſerves, that the Romans, in one year, carried fifty times as many lions from Lybia, to combat in their amphitheatres, as are now to be found in the whole country. In Turkey, Perſia, and the Indies, their numbers are alſo diminiſhing daily. This diminution is eaſily accounted for: it is occaſioned by the encreaſe of mankind, who alone are capable of ſubduing theſe tyrants of the foreſt. The arms of even an Hottentot or a negroe, make them more than a match for this noble animal, and they are generally victorious when they attack him. When they have diſcovered the lion's retreat, they arm themſelves with ſpears headed with iron, and provoke him to the combat: four men are generally conſidered as ſufficient for ſuch an encounter. The firſt againſt whom the lion flies, re-

* Leo Afr. 342.

ceives him on his ſpear, which furniſhes the others with an opportunity of attacking him behind; the lion, finding himſelf wounded in the rear, turns that way, which gives the firſt man time to recover. Thus is he attacked on all ſides, till, at length, they diſable and diſpatch him.

The arts of man, thus exerciſed, ſerve to enervate and diſcourage theſe animals, as well as conquer them; for they are brave only in proportion to the ſucceſs of their former encounters. In the vaſt deſerts of Africa, where man has not fixed his habitation, lions are very numerous, and preſerve their natural ſtrength. Accuſtomed to conqueſt in their engagements with other animals, they become intrepid and terrible. They have never experienced the dangerous combinations of man, and therefore boldly face him, ſeeming to brave the force of his arms. Nor are they afraid of numbers; a ſingle lion of the deſert frequently attacks an entire caravan, and, when he finds himſelf over-powered, he maintains an obſtinate combat, and faces the enemy till he dies: on the contrary, thoſe lions which inhabit the peopled coun-

tries of Morocco and India, having experienced man's ſuperiority, have ſo far loſt their courage, as to be ſcared away with a ſhout; and only venture to attack the timid and unreſiſting flocks and herds, which women and children are ſufficient to protect.

From this alteration in the lion's diſpoſition, it ſeems probable that the lion might be tamed. The keepers of wild beaſts often play with this animal, pull out his tongue, and even chaſtiſe him without a cauſe; which he uſually permits with the utmoſt compoſure; but, if his anger ſhould happen to be excited, the conſequences are terrible. We are informed, by Labat, that a gentleman kept a lion in his chamber, and employed a ſervant to attend it, who, as is uſual, ſometimes careſſed, and ſometimes chaſtiſed it: this gentleman was one morning awakened by a noiſe in his room, which he could not immediately diſcover the cauſe of; but, drawing the curtains, he perceived the lion growling over the man's head, which he had ſeparated from the body, and toſſing it round the floor with his paws. He therefore cauſed the animal to be immediately ſecured.

As

As the paſſions of the lion are ſtrong, and his appetites vehement, it is not extraordinary that his natural ferocity ſhould return; but he ſeldom exerts it againſt his benefactors. It appears indeed from numberleſs accounts, that his anger is noble, his courage magnanimous, and his diſpoſition grateful. His courage is tempered with mercy, and he has been known to ſpare the weaker animals, as if they were beneath his attention.

The eyes of a lion are always bright and fiery, and they preſerve this look of terror even in death. The ſtructure of the paws, teeth, eyes, and tongue, are perfectly the ſame as in a cat, and theſe two animals ſo nearly reſemble each other in the internal parts, that there is hardly any diſtinction but in their ſize.

When hungry, the lion attacks any animal that comes in his way; but, as he is a formidable enemy, and therefore carefully avoided, he is ſometimes obliged to hide in order to take them by ſurprize; and when his prey comes within a proper diſtance, he ſprings at it, and frequently ſeizes it at the firſt bound. His teeth are ſo very ſtrong, that

that he finds no difficulty in breaking the bones of an animal, and he ſwallows them with the fleſh. He laps like a cat, and drinks frequently, but ſlowly. He requires about fifteen pounds of raw fleſh in a day, and prefers that of live animals, or of thoſe which are juſt killed: ſeldom chooſing to touch the bodies of any creature, when they begin to putrify.

The roaring of the lion, when heard in the night, and re-ehoed by the mountains, reſembles diſtant thunder. This roar is his natural note; his cry of anger being a different growl, which is ſhort, broken, and reiterated. His cry of anger is alſo much louder and more formidable. He then laſhes his ſides with his long tail, and his mane ſeems to ſtand like briſtles round his head; the muſcles of his face are greatly agitated, and his huge eye-brows cover a great part of his glaring eye-balls; he diſcovers his teeth and tongue, and extends his formidable claws. Thus prepared for the war, few of the natives of the foreſt will venture to engage him. The elephant, the rhinoceros, the tiger, and the hippopotame are the only animals that preſume to oppoſe

him

him ſingly: but neither the leopard nor the wild boar will ſhun the combat, when provoked. They do not ſeek the lion to engage him, but they will not fly at his approach. When compelled by extreme hunger, and then only, the lion will attack thoſe animals, but otherwiſe they paſs by each other very quietly.

The young lion always lives in the foreſt, at a great diſtance from any human habitation, where he remains while he is able to live by his natural induſtry; but when he becomes old, and leſs capable of hunting the ſavage inhabitants in thoſe retreats, he ventures into places more frequented; attacks the flocks and herds near the habitation of the ſhepherd or the huſbandman, and depends for ſupport rather on his courage than his activity and addreſs. In theſe deſperate ſallies, however, he never attacks men, if quadrupeds are to be found, unleſs they provoke him to engage.

The lioneſs goes five months with young, and never produces more than two cubs at a time, which are harmleſs, pretty, and playful: they remain about twelve months at the teat, and are five years

years in coming to perfection. As to the length of a lion's life, naturaliſts have hitherto been much miſtaken; Mr. Buffon, and ſome others, ſaying they did not live above twenty, or twenty-two years. But, Pompey, the great he lion which died in the year 1760, was known to have been above ſeventy years in the tower; and another lately died there, aged ſixty-three years and upwards, which was brought from the river Gambia. It is indeed highly probable, that, in his native foreſts, his age is equal at leaſt to that of man.

The attachment of the lioneſs to her young is exceſſive. Though naturally leſs ſtrong, leſs courageous, and leſs miſchievous than the lion, ſhe becomes terrible when ſhe has young ones to make proviſion for: ſhe then, with more intrepidity than the lion, throws herſelf among men, and other animals; deſtroys every creature ſhe finds, without diſtinction; loads herſelf with the ſpoil, and carries it reeking to her cubs; which ſhe early initiates to cruelty and ſlaughter. She chooſes, for her young, the moſt retired and inacceſſible places, and often hides her tracks by bruſhing

bruſhing them out with her tail: and, if ſhe has ſtrong apprehenſions of danger, ſhe removes her young to another place. If ſhe is obſtructed in this office, ſhe defends them courageouſly, and fights till ſhe expires or conquers.

The Arabs entertain a notion that the lion ſpares the tender ſex, but Dr. Shaw * informs us, that they make no diſtinction in theſe days: he likewiſe acquaints us that the fleſh of the lion is often eaten in Barbary, and that it reſembles veal in taſte. The animal called puma, which is miſtaken for the lion, is, when compared, a very contemptible animal, without either the ſhape, the ſize, or the mane of the lion.

Plutarch ſays, that the lion was conſecrated to the ſun; becauſe, of all animals with crooked claws, it is the only one that is born with ſight, and becauſe it ſleeps very little, and with its eyes open: but this is fabulous. The lion was conſecrated to Vulcan in Eygpt, on account of its fiery conſtitution. The poets yoke two lions to the chariot of Cybele, as appears by ſeveral medals. The effigy of a lion was alſo carried in

* Shaw's Travels, p. 244.

the

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Black tyger
male Panther
Lynx

he ſacrifices of that goddeſs; becauſe he galli, her prieſts, had diſcovered the ecret of ſoftening and even taming ions, to ſuch a point as to touch and areſs them without fear, according to Varro. The Leontines adored the lion, nd put its head on their coins.

THE TIGER.

No quadruped can be more beautiful han this animal; the gloſſy ſmoothneſs f his hair, the extreme blackneſs of he ſtreaks with which he is marked, on ground of a bright yellow colour, greeably ſtrike the beholder. The legance of his form is equal to the eauty of his colouring. He is larger han the leopard, though ſlenderer and more delicate. But the diſpoſition of his animal is as miſchievous, as his orm is beautiful; as if providence in-ended to ſhew that beauty was of no ſtimation, by beſtowing it on the moſt oxious of animals. The tiger is pe-uliar to Aſia, and is found as far north s China, and Chineſe Tartary; but he greateſt numbers, the largeſt, and he moſt cruel, are met with in India, nd its iſlands. The principal diſtinc-

tion of the tiger, and in which it differs from other mottled beaſts, is in the form of its colours, which run in ſtreaks in the ſame direction as the ribs, from the back down to the belly. On the leopard, the panther, and the ounce, the colours are broken in ſpots all over the body; but in the tiger they extend lengthwiſe, and hardly a round ſpot is to be found on its ſkin.

Of all animals the tiger moſt reſembles the cat in ſhape, which, if obſerved through a proper magnifying-glaſs, will convey a tolerable idea of the former. The tiger is the only animal whoſe ſpirit ſeems untameable; neither force nor flattery has the leaſt effect on its ſtubborn nature; and with equal malignity it ſnaps at the hand that feeds it, as that by which it is chaſtiſed. One of theſe animals is now in the Tower, which has the appearance of being a good-natured inoffenſive creature; it has neither ferocity nor anger in its countenance; and yet it is fierce and ſavage beyond meaſure: correction cannot terrify it, nor indulgence tame it. The lion ſeldom ravages except when excited by hunger; but the tiger is inſatiable, and continues

tinues the carnage after he is glutted with ſlaughter. When he diſcovers a flock or an herd, he gives no quarter, but levels all with indiſcriminate fury, hardly finding time to appeaſe his appetite, he is ſo intent upon ſatisfying the malignity of his nature. Animals of all kinds, whether wild or tame, fall a ſacrifice to his fury, and he ſometimes ventures even to attack the lion.

Tigers are the ſcourge of the country where they inhabit: they lurk among the buſhes, on the ſides of rivers, and almoſt depopulate many places; they ſeem to prefer preying on the human race rather than on any other animals. They do not purſue their prey, but bound on it from their ambuſh with great elaſticity, and from a diſtance that is almoſt incredible. If they miſs their object, they inſtantly retire, but, if they ſucceed, they carry off their prey with the greateſt eaſe, even if it is as large as a buffalo. If they are undiſturbed, they plunge their head into the body of the animal up to the very eyes, as if it were to ſatiate themſelves with blood. In their devaſtations, there is a ſort of

cruelty unknown to the generous lion; as well as a kind of cowardice in their ſudden retreat on any diſappointment.

There is a popular notion in ſome parts of India, that the rhinoceros and the tiger are in friendſhip, becauſe they are often ſeen near each other. The truth is, the rhinoceros, like the hog, loves to wallow in the mire; on which account he frequents the banks of the rivers; and the tiger, to quench his raging thirſt, is found in places contiguous to them.

Happily for the reſt of nature, this animal is not common; the ſpecies being chiefly confined to the warmeſt provinces of the Eaſt. Some travellers have compared the tiger to an horſe, with reſpect to ſize, and others to a buffalo; while others have only ſaid it was much larger than a lion. Mr. Buffon informs us that he has been aſſured by one of his friends, whoſe varacity he can rely on, that he ſaw a tiger in the Eaſt-Indies of fifteen feet long. He probably included the tail, in theſe dimenſions; therefore, allowing four feet for that, it muſt have been eleven feet from the tip of the noſe to the inſertion of the tail. To give a complete idea

of

of the ſtrength of the tiger, we ſhall quote the ſubſtance of a paſſage from father Frenchard, who ſaw a combat between a tiger and two elephants at Siam. It was within a lofty paliſade, about an hundred feet ſquare; at firſt three elephants were produced, with their heads and part of their trunk covered with a kind of armour: a tiger was then brought forth from its den, of a ſize much larger than he had ever ſeen before. It was at firſt held with cords, and one of the elephants approaching, gave it ſeveral blows on the back with its trunk, with ſuch force, that the tiger fell, and for ſome time lay motionleſs. But, when he was ſet at liberty, though the firſt blows had greatly abated his fury, he made at the elephant with a loud ſhriek, and aimed at ſeizing his trunk. The elephant drew it up with great dexterity, received the tiger on his great teeth, and threw it up into the air: after this it was diſcouraged from venturing again to approach the elephant; inſtead of which he made ſeveral circuits round the paliſade, frequently attempting to fly at the ſpectators. At length three elephants were ſent againſt it, who ſtruck it ſo terribly

with their trunks, that it once more lay for dead; and it certainly would have been killed, had not the combat been put a ſtop to. From this account we may form an opinion of the ſtrength of this animal, which under ſuch diſadvantages, ventured to continue the engagement, againſt ſuch potent enemies that were covered and protected from his fury.

We are informed by captain Hamilton, that in the Sundah Rajha's dominions, there are no leſs than three ſorts of tigers, the ſmalleſt of which are the fierceſt. The ſmall ones are about two feet high, the ſecond three feet, and the larger ſort above three feet and an half high. But the latter, though poſſeſſing ſuperior powers, is leſs rapacious than either of the former. This formidable animal is called the royal tiger, and does not ſeem ſo ravenous nor ſo dangerous. One of theſe tigers is now to be ſeen at the Tower.

We have no certain accounts as to the number of young which the tigreſs brings forth, but it is ſaid ſhe produces four or five at a time. Though furious at all times, upon this occaſion her ferocity is incredible. If ſhe is robbed

robbed of her young, enraged ſhe purſues the ſpoiler, who, in order to ſave a part, uſually drops one of her cubs: this ſhe carries back to her den, and again purſues him; he then drops another, with which ſhe runs to her den as with the former, and the plunderer generally eſcapes with the remainder before ſhe returns. If ſhe is robbed of all her young, ſhe becomes deſperate, boldly approaching the towns, where ſhe commits incredible ſlaughter.

The ſkin of the tiger is much eſteemed all over the Eaſt, eſpecially in China, where the mandarins cover their ſeats of juſtice with it; but, in Europe, thoſe of the panther and leopard are held in much greater eſtimation. The Indians ſometimes eat the fleſh of this animal, though they do not look upon it as a delicacy. There is an animal of America, improperly called the red tiger, which Mr. Buffon calls the couger: it is very different from the tiger of the Eaſt.

The tiger often accompanies the monuments of Bacchus; and the chariot of that god is uſually drawn by tigers. Tigers are ſometimes ſeen at the feet of the Bacchanals. Is it to characteriſe the

the fury with which they are agitated?

THE PANTHER.

THIS animal has been miſtaken for the tiger by many naturaliſts; and indeed it approaches next to it in ſize, in beauty, in cruelty, and in its general enmity to the animal creation. It is however ſpotted, and not ſtreaked like the tiger; in which particular that animal differs alſo from the leopard, and moſt of the inferior ranks of this miſchievous family. The panther is an inhabitant of Africa, from Barbary to the remoteſt parts of Guinea *. It is to Africa what the tiger is to Aſia; with this alleviation, that it prefers the fleſh of other animals to that of mankind; but, when excited by hunger, attacks every thing that hath life without diſtinction. It ſeizes its prey like the tiger, always by ſurprize; and will alſo climb up the trees in purſuit of monkies and leſſer animals. It is an untameable ſpecies, always retaining its

* Shaw's Travels, 244.

fierce

fierce malevolent aſpect, and continual growl or murmur.

The antients were well acquainted with this animal. One would indeed have imagined that the Romans would have exhauſted the deſerts of Africa, by the numbers they drew from thence for their public ſhews. Scarus exhibited one hundred and fifty panthers at one time; Pompey the great four hundred and ten, and Auguſtus four hundred and twenty: but though they thinned the coaſts of Mauritania of theſe animals, they ſwarm in the ſouthern parts of Guinea to this day.

THE LEOPARD.

THE leopard, called alſo the panther of Bengal, is a native of Senegal and Guinea. The principal differences between this animal and the panther abovementioned are theſe. The large panther is often found to be ſix feet long, from the noſe to the inſertion of the tail, and the leopard or panther of Senegal, ſeldom exceeds four. The large panther is marked in different places with five or ſix ſpots, forming a kind of circle, with a large one in the middle,

middle. The latter has a more beautiful coat; the ſpots are ſmaller and diſpoſed in cluſters, which have a pleaſing appearance, as the yellow ground is more brilliant. As to the reſt, the ſpots of both are black, they are both whitiſh under the belly, and the tails of both are long; but thoſe of the leopard are rather longer in proportion. Theſe animals ſpare neither man nor any other creature: when they cannot get a ſufficient ſupply of the beaſts of the chace, they deſcend in crouds from the internal parts of Africa, and make terrible havock among the numerous herds that cover the rich meadows of the Lower-Guinea; they tear their prey in pieces both with their claws and teeth; and are always thin, though perpetually devouring. The negreſſes make collars of their teeth, to which they attribute certain virtues. Theſe animals are taken in pit-falls, covered over with ſlight hurdles, on which a bait of fleſh is placed. Their fleſh is ſaid to be well taſted, and as white as veal: their ſkins are very valuable, and are often brought into Europe.

The jaguar, or panther of America, reſembles the two former, except in the diſpoſition

diſpoſition of its ſpots, and that its neck and head are rather ſtreaked than ſpotted. Theſe three animals have indeed but very ſlight differences. Mr. Buffon chiefly diſtinguiſhes them by the ſize.

THE HUNTING LEOPARD.

THE face of this animal is ſlightly ſpotted, and its body is of a light tawny brown, marked with a great number of ſmall round black ſpots; not in circles, but each diſtinct. Its tail is longer than the body, and of a reddiſh brown colour. It is about the ſize of a large greyhound; has a long body, narrow cheſt, and very long legs. It is a native of India, and is tamed and trained for the chace of antelopes. It is carried to the foreſt in a ſmall kind of waggon, and is chained and hood-winked till it approaches the herd. It does not make its attack immediately as it is unchained, but winds along the ground, and endeavours to conceal itſelf till it gets a proper advantage, when it darts on the animals with ſurprizing ſwiftneſs. If it does not ſucceed in its firſt efforts, conſiſting of four or five leaps, it miſſes its prey; and, for that

that time *, gives up the point, and readily returns to its maſter, having loſt its breath, and finding itſelf unequal in ſpeed.

THE OUNCE.

THE ounce is conſiderably ſmaller than the panther, and ſeldom exceeds three feet and an half in length; but its hair is longer than that of the panther, and its tail ſtill more ſo in proportion. The colour of the ounce is rather inclining to a cream-colour, but rather whiter towards the belly than on the back: the hair on the belly is alſo longer than on the back. Its ſpots are diſpoſed ſomewhat like thoſe of the panther, except that on the haunches it has rather ſtripes than ſpots. This ſpecies is of a ſtrong make, and has ſhort legs and a ſhort back. It is a native of Barbary, Perſia, and China; and is an animal of a more gentle nature than moſt of the preceding. Like the laſt, it is uſed for the chace of antelopes, and even hares. It is not, like the leopard, conveyed in a waggon, but is carried on the crupper on horſe-

* Tavernier's Travels, I. 147.

back:

back: it is as obedient as a ſetting-dog, returns up his maſter's call, and jumps behind him *.

THE TIGER CAT.

THIS animal is called the ocelot, by Mr. Buffon, and the Mexican ounce by Mr. Pennant. It is leſs than the ounce, but its ſkin is more beautifully variegated. It inhabits Mexico, the neighbourhood of Carthagena, and Braſil. It lives in the mountains, and is very voracious, but fearful of mankind. It preys on calves and different ſorts of game. It lurks amidſt the leaves of trees, and ſometimes will extend itſelf along the boughs, as if dead, till the monkies, tempted by their natural curioſity, approaching to examine it, become its prey. The fur is of a reddiſh colour, beautified with black ſpots, and ſtreaks of different figures: the ears are ſtriped acroſs with black, but in other reſpects they reſemble thoſe of a cat. The colours however are not permanent, though minutely deſcribed by many naturaliſts, ſome of them having been ſeen that were entirely brown.

* Olearius's Travels into Perſia, 218.

THE LYNX.

THE principal diſtinction between the lynx and thoſe of the panther kind, is in its tail, which is about half as long in proportion, and black at the extremity. Its fur is much longer, and the ſpots on the ſkin are tufted and irregular. Its ears are longer, and tipped with a black tuft of hair at the points. This animal does not exceed the ounce in ſize, but is rather ſtronger built, and has only twenty-eight teeth. It is an inhabitant of the hotteſt parts of South-America, and is a very fierce animal. Like the tiger, it plunges its head into the body of its prey, and ſucks out the blood before it devours it. It makes a noiſe in the night like the howling of an hungry dog; but is a very cowardly animal, and eaſily put to flight, either by a ſhepherd's dog, or by a lighted torch, being much terrified at fire. It lies in ambuſh near the river ſide; and a ſingular combat ſometimes happens between this animal and the crocodile. When the lynx comes to the river to drink, the crocodile, which is always ready to ſurprize any

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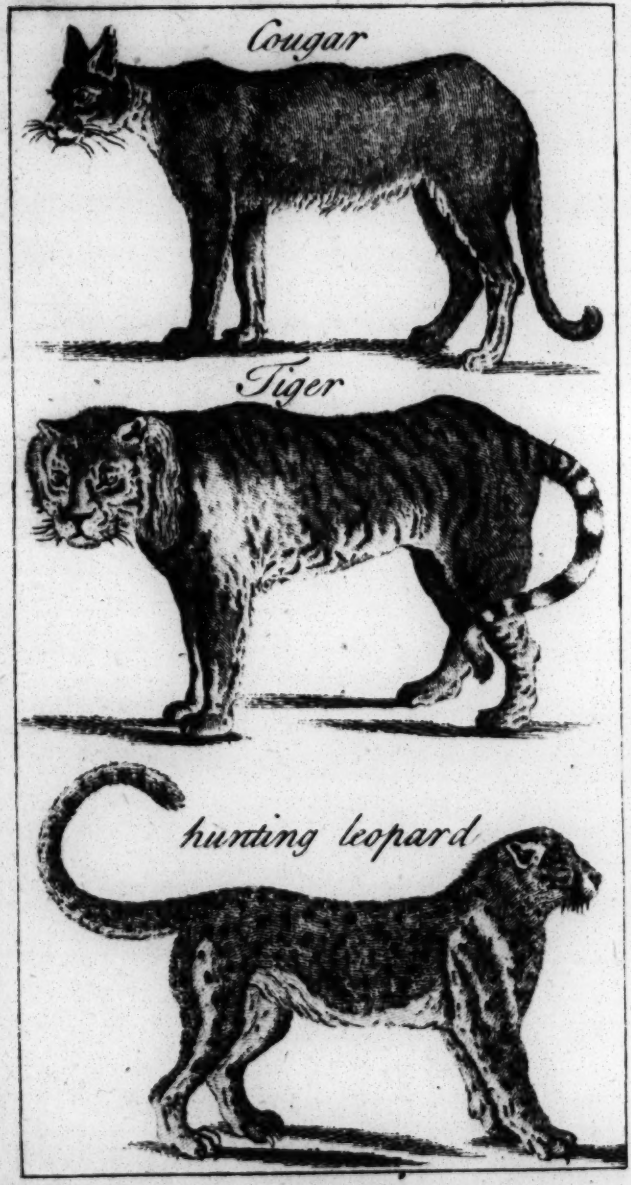
Cougar
Tiger
hunting leopard

animal that approaches, raiſes its head out of the water; the lynx immediately ſtrikes its claws into the only penetrable part of this dreadful reptile, which is the eyes; the crocodile inſtantly dives under the water, pulling his enemy after him, where they uſually periſh together *.

THE COUGAR.

THIS animal is called the red tiger by Mr. Buffon, but it is extremely different from the tiger of the Eaſt. It is a native of the continent of America, from Canada to Brazil; and in South-America is called Puma, and miſtaken for the lion. It is the ſcourge of the colonies in the hotter parts of America, and is fierce and ravenous to the higheſt degree. It ſwims over the broad rivers, and attacks the cattle even in incloſures. When preſſed with hunger, it does not even ſpare mankind. But their fury is ſubdued by the rigour of the climate in North-America: the ſmalleſt cur, when accompanied by his maſter, will there make them ſeek for ſecurity by running

* Condamine's Voy. 81.

up the trees; but then they are equally deſtructive to domeſtic animals, and are the greateſt nuiſance that the planter has. When they lay in wait for the mooſe or other deer, they lie cloſe on the branch of a tree till the animal paſſes beneath, when they drop upon him, and immediately deſtroy him. Wolves are alſo the prey of this animal. The fur of the cougar is ſoft, and eſteemed among the Indians, who during the winter cover themſelves with it; the fleſh is eaten by them, and is ſaid to be as white and as good as veal. The back, neck, rump, and ſides of this animal is of a browniſh red, mixed with duſky hairs, and the belly is whitiſh; the teeth are of a vaſt ſize, and the claws are white. It purrs like a cat, and has a tail about two feet eight inches long.

THE SIAGUSH.

THIS is a native of India, Perſia, and Barbary, and reſembles the lynx in ſize, in form, and in the ſingularity of being tufted at the tips of the ears. The upper-part of the body is of a very pale reddiſh brown; the tail rather

ther darker; and the belly and breaſt whitiſh. The ſiaguſh is often brought up tame, and uſed in the chace of leſſer quadrupeds, and the larger ſort of birds, which they ſurprize with great addreſs. It is very fierce when provoked, and when it ſeizes its prey, it holds it faſt in its mouth, and for ſome time lies motionleſs on it. This creature is ſaid to attend the lion, and to feed on the remains of the prey which that animal leaves.

THE ANGORA CAT.

THIS animal has its name from the place it inhabits. It has long hair of a ſilvery whiteneſs, and ſilky texture; but it is remarkably long about the neck, where it forms a fine ruff: the hair on the tail is very long and ſpreading. Theſe animals are in plenty in Angora; the ſame country which produces the fine haired-goat. After the firſt breed, they degenerate in our climate.

THE SERVAL.

THIS is a native of Malabar, and reſembles the panther in its ſpots, but

the lynx in ſize, form, and the length of its tail. It is fierce and untameable, and lives in trees, where it breeds, and ſeldom deſcends on the ground. It leaps from tree to tree with great agility, and by the natives of Malabar is called the maraputé. By the Portugueſe it is called the ſerval, and Mr. Buffon gives it the ſame appellation. Its fur is of a whitiſh yellow, with duſky ſpots all over it. It has a very piercing ferocious look.

From what has been ſaid of this rapacious tribe, a ſimilitude of manners and diſpoſitions may be perceived from the lion to the cat; the ſimilitude of their internal conformation is ſtill more exact, and the whole race may be conſidered as the moſt formidable enemies of mankind.

THE BLACK BEAR.

THERE are three different kinds of the bear, the brown bear of the Alps, the black bear of North-America, which is ſmaller, and the great Greenland, or white bear. Though different in form and diſpoſition, they are doubtleſs of the ſame original, and owe their princi-

pal

pal variations to food and climate. The bears of America are ſmall and black, and feed only upon vegetables, particularly mayze and potatoes, of which they are remarkably greedy; Du Pratz ſays the bear will even reject animal food, though preſſed by hunger *; but Dr. Goldſmith † affirms the contrary, declaring he has often ſeen the young ones, which are brought over to London, prefer fleſh to every kind of vegetable aliment. Theſe animals ſtrike with their fore-feet like a cat, and very ſeldom uſe their mouths in fighting, but ſeize the aſſailant with their paws, and, preſſing him againſt their breaſt, almoſt inſtantly ſqueeze him to death. When the females are with young, they retire into the moſt ſecret places; leſt, when they bring forth, the males ſhould deſtroy their cubs: their retreat during their pregnancy is ſo impenetrable that out of the ſeveral hundred bears that are killed in America during winter, (which is their breeding ſeaſon) hardly a ſingle female is found among them. They bring forth two, and ſometimes

* Du Pratz Louiſiana, II. 56, 57.
† Goldſmith's Hiſt. vol. IV. 321.

three

three at a time; and, though the cubs are deformed, they are not ſo ſhapeleſs as to be licked into form, as the ancients pretended. The fleſh of a bear in autumn, when they are become exceedingly fat, by feeding on acorns and other maſt, is moſt delicate food; and that of the cubs is ſtill more excellent; but the paws of the old bears are reckoned the moſt delicious morſel. Their fat alſo, which preſerves a certain degree of fluidity, is very white and ſweet.

After having fattened himſelf to the greateſt degree, the bear retires to its den, where he continues forty or fifty days in total inactivity, and abſtinence from food; but, at the end of that time, he is forced from his retreat by hunger, and when he comes forth to ſeek for freſh nouriſhment, he ſeems to have ſlept all his fleſh away. It is a vulgar error, that during this time, they live by ſucking their paws; they rather ſubſiſt upon the exuberance of their former fleſh, and only feel the call of appetite, when the fat which they had acquired in ſummer, becomes almoſt exhauſted.

Their

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Persian Lynx
Syagush
Bronn Bear

Their retreats are either in the cliffs of rocks, in the deepeſt receſſes of the thickeſt woods, or in the hollows of decayed trees, which they aſcend and deſcend with ſurpriſing agility. Multitudes of bears are annually killed in America for their fleſh and ſkins, both of which are valuable, but the latter makes a conſiderable article of commerce.

The bear has a long head, ſmall eyes, and ſhort ears, rounded at the top. Its body is covered with very long and ſhaggy hair. Its limbs are ſtrong, thick, and clumſy; it has a ſhort tail, and large feet. Beſides the black, brown, and white bears, there are ſome on the confines of Ruſſia, which are black mixed with white hairs, and are called by the Germans ſilver-bar.

THE BROWN BEAR.

THE brown bear is not only ſavage but ſolitary; it is ſometimes carnivorous, and will deſtroy cattle, and eat carrion; but the general food of this and the other varieties, is roots, fruits, and vegetables: it will rob the fields of

of peaſe, and pluck up great quantities of them when they are ripe: it will afterwards beat them out of the huſks on ſome hard place, eat them, and carry away the ſtraw. In the winter it will alſo break into the farmer's yard, and make great havock among his oats.

The voice of the bear is a kind of growl, and though, when tamed, it appears gentle and placid to its maſter, yet it ſhould be cautiouſly managed, as it is often capricious, treacherous, and revengeful. This animal, though in appearance extremely aukward and ſtupid, is capable of receiving ſome inſtruction. There are very few who have not ſeen it dance upon its hind feet; though its air and motions are ſo ungraceful, that a bad performer at a ball, is ſaid proverbially to dance like a bear. It is taught to perform in this manner, by ſetting it upon hot plates of iron, and playing to it while it is in this uneaſy ſituation.

When come to maturity the bear can never be tamed; but notwithſtanding its fierceneſs, the natives in thoſe countries where it inhabits hunt it, with great alacrity. The moſt general and leaſt dangerous method of taking it is thus;

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white Bear

Wolverene

Badger

thus: they mix brandy with honey, of which it is extremely fond, and laying it in the hollow of trees, the animal finds it, devours it, and becomes intoxicated. In Canada, where black bears are very numerous, and where their dens are made in trees, which are hollow towards the top, they are taken by ſetting fire to their retreats, which are frequently from twenty to thirty feet from the ground. The old bear generally ventures firſt out of its den, and is ſhot by the hunters, and the young ones, as they deſcend, are caught in a nooſe.

THE WHITE OR POLAR BEAR.

THE white bear grows to a vaſt ſize, and as the lion is the tyrant of an African foreſt, ſo the bear is the undiſputed maſter of the icy mountains in Greenland and Spitzbergen. When our mariners land in unfrequented places, upon any of thoſe ſhores, the white bears come down to view them: they approach ſlowly, as if they were undetermined whether to advance or retreat, being naturally a timid animal, but it is encouraged by ſucceſs. When ſhot at, or

or wounded, they endeavour to fly, but if they find themſelves incapable of flight, they make a fierce and vigorous reſiſtance till they die. Theſe animals live upon fiſh, ſeals, and the carcaſes of whales; they alſo feed on human bodies, which they greedily diſinter. They delight in human blood, and are ſo daring as to attack companies of armed men, and even to board ſmall veſſels. In the ſummer, the white bears reſide on an iſland of ice, or paſs from one iſland to another. They are good ſwimmers, and dive with great agility; but ſometimes a battle enſues between a bear and a morſe or a whale, in which the latter is generally victorious, as being more expert in its own element. If the bear, however, ſhould be fortunate enough to find a young whale, he is ſufficiently repaid for the danger he incurs of meeting with the parent.

The affection between the female white bears and their young is ſo ſtrong, that they would rather die than deſert each other. This animal is confined to the coldeſt part of the globe; the frigid iſlands ſeem entirely adapted to its nature; for it does not appear from

from any authority that it is met with farther ſouth than Newfoundland. Such as have appeared in other parts have been involuntarily carried there on floating iſlands of ice; ſo that the countries of Norway and Iceland are acquainted with them only by accident.

The fleſh of this animal is white, and has the taſte of mutton: its fat is melted for train-oil, and that extracted from the feet is uſed in medicine. The liver is very unwholeſome; three of Barentz's ſailors having eat ſome of it boiled, fell dangerouſly ill. One of this ſpecies was ſhewn in England a few years ago. It roared loud, was very furious, continually in motion, and ſeemed very uneaſy, except when water was poured over him to cool him.

Dr. Goldſmith ſays *, "It often happens, that when a Greenlander and his wife are paddling out at ſea, by coming too near an ice-float, a white bear unexpectedly jumps into their boat, and if he does not overſet it, ſits calmly where he firſt came down, and

* Goldſmith's Hiſt. vol. IV. page 326.

like a paſſenger ſuffers himſelf to be rowed along. It is probable the poor little Greenlander is not very fond of his new gueſt, however, he makes a virtue of neceſſity, and hoſpitably rows him to ſhore."

THE WOLVERENE, OR GLUTTON.

THIS animal is called the wolverene by the factory at Hudſon's Bay, but by the natives, quickhatch. It has a black ſharp-pointed viſage, and ſhort round ears, almoſt covered with the hair. On the head, back, and belly, the hair is reddiſh, with black tips, ſo that at the firſt view thoſe parts appear quite black; the ſides are of a yellowiſh brown; on the throat is a white ſpot, and on the breaſt a white mark in the form of a creſcent: the legs are of a deep black, and thick, ſhort, and ſtrong. This animal reſts on its foot like the bear, as far as the firſt joint of the leg. Its tail is cloathed with long coarſe hair, reddiſh at the baſe, and black at the end. The length of this creature is twenty-eight inches from noſe to tail, and the whole body is covered

ered with very long and thick hair, arying in colour according to the ſea- n. It is an inhabitant of Hudſon's ay and Canada, and is found under e name of the glutton in the north- n parts of Europe and Aſia, being a tive of the moſt rigorous climates. It a moſt voracious animal, but ſo ſlow foot, that it is obliged to take its ey by ſurprize. It often lurks in ees, and falls on the quadrupeds that ſs under. It will faſten on the oulders of the horſe, elk, or ſtag, d continue eating a hole into its dy, till the animal falls down with e pain. It ſearches for the traps tended for ſables and other animals, d often is beforehand with the huntſ- n, who ſuſtains great loſſes by the utton.

It is very fierce in a wild ſtate, and a terror to both the wolf and the ar. The ſkin is ſold in Siberia for e or ſix ſhillings; and it is ſtill more luable in Kamtſchatka, where the men embelliſh their hair with its ite paws, which they eſteem a great nament. The fur is in great eſti- tion in Europe; that of the north Europe and Aſia is much finer,

blacker, and more gloſſy than that of the American kind.

THE RACOON.

THIS animal is about the ſize of a ſmall badger. Its body is ſhort and bulky; it has a ſharp-pointed black noſe, ſhort ears, and eyes ſurrounded with two broad patches of black; the upper jaw is longer than the under; the teeth reſemble thoſe of a dog; the tail is thick, but tapering, and regularly annulated with black; the fore-feet are ſhorter than the hinder, and both are armed with five ſharp claws. It inhabits the warm and temperate parts of America, and is alſo found on the mountains of Jamaica. It is eaſily tamed, and is then very good-natured and ſportive, but as unlucky as a monkey, and perpetually in motion. Like the ſquirrel, it holds its food in its paws whilſt eating; in this reſpect it differs from the monkey-kind, which uſe only one hand upon theſe occaſions, but the racoon and the ſquirrel uſe both. Though this animal is ſhort and bulky, it is extremely active; with the aſſiſtance of its pointed claws it climbs nimbly up

he trees; it runs upon the trunk with he ſame facility that it moves upon he plain; and ſports upon the branches of the trees with eaſe, ſwiftneſs, and ecurity. It is very curious and inquiitive, examining every thing with its paws. It is extravagantly fond of ſweet hings, and ſtrong liquors, and will et exceſſively intoxicated. Like the ox, the racoon is very deſtructive to oultry, and, like that animal, has a arge portion of cunning. It will eat ny kind of fruit, green corn, &c. and, f near the coaſt, will feed on oyſters at ow water. It will watch the opening of the oyſter, and ſnatch out the fiſh with its claw; but ſometimes the ſhell loſes upon its paw, and keeps it faſt till the coming in of the tide, by which means the racoon is drowned. The fur of this animal is next to that of the beaver, and is excellent for making hats. There is one very remarkable peculiarity in the racoon. In drinking it both ſucks up its liquor like the horſe, and laps it like the dog.

THE BADGER.

THE legs of this animal appear very ſhort, and the body almoſt to touch the ground. It has ſmall eyes, ſhort round ears, and a ſhort thick neck; the noſe, chin, lower ſides of the cheeks, and the middle of the forehead, are white; it is covered with long coarſe hair like briſtles, which makes the animals legs ſeem much ſhorter than they really are. The uſual length of the badger is two feet four inches, excluſive of the tail, which is about four inches. The hair on the body is of three colours, the bottoms are of a dirty yellowiſh white, the middle black, and the ends grey; whence aroſe the proverb, "As grey as a badger." It has a gland under its tail, which exudes a ſubſtance of a fœtid ſmell: this ſeems peculiar to the hyæna and the badger. It is a ſolitary ſtupid animal, and, remote from man, digs a deep hole with great aſſiduity. It ſteals out at night to find ſubſiſtence, but ſeldom quits its retreat in the day-time, chooſing, it is imagined, to avoid the light.

The

The fox, not being expert at digging into the earth, or not chooſing to take much trouble, cunningly takes poſſeſſion of that which has been quitted by the badger, and, ſome ſay, forces it from its retreat, by offenſive diſcharges at the mouth of the badger's hole.

The badger is accuſed of deſtroying lambs and rabbits; but there appears to be no foundation for the charge: though furniſhed with ſtrong teeth, as if it was formed for rapine, it is found to be an inoffenſive animal, feeding upon roots, fruits, graſs, inſects, and frogs. Nature having denied this animal the ſpeed and activity requiſite to eſcape its enemies, hath ſupplied it with ſuch weapons of offence, that very few creatures would hazard the attacking it: when purſued, it ſoon comes to bay, and combats with deſperate reſolution. It is an indolent animal, and ſleeps the greateſt part of its time; it is therefore always found very fat. The female brings forth but once a-year, which is in ſummer, and generally produces four or five at a time.

Theſe animals are hunted in the winter nights, and when taken, their hind quarters are ſometimes made into hams, which are ſaid to be good eating. The ſkin, with the hair on, is uſed for piſtol-furniture, and of the hair, bruſhes are made to ſoften ſhades in painting. Badgers inhabit moſt parts of Europe, as far north as Norway and Ruſſia, and the deſert beyond Orenburg, in the Ruſſian Aſiatic dominions, north of the Caſpian ſea. They are alſo found in China, and are often ſeen in the butchers ſhops in Pekin, being much admired by the Chineſe. The parts of England in which they now chiefly abound, are Eſſex, Suſſex, and ſome of the midland counties.

The way to catch badgers is with a ſpringe, or ſteel trap, or to dig a pit acroſs their path, five feet deep, and four feet long, making it narrow at the top and bottom, and wide in the middle. This muſt be covered with ſmall ſticks and leaves, that the badger may not ſuſpect any deſign, and that he may fall in when he comes upon it. Some hunt them into their holes in a moon-ſhine night, and then dig them out.

out. *Mortimer's Huſbandry*, vol. I. page 314.

THE OPOSSUM.

THE head of the opoſſum reſembles that of the fox; it has fifty teeth, but two in the middle are very large like thoſe of the rat; the eyes are ſmall, black, lively, and placed upright; the ears are large, broad, naked, and tranſparent, like thoſe of the rat kind: the baſe of the tail, for about three inches, is cloathed with long hair like that on the back, but the reſt of the tail is covered with ſmall ſcales, appearing naked at firſt view. The body is round and pretty thick, and the legs ſhort. The feet reſemble hands, each having five toes or fingers, with white crooked nails.

The tail of this animal has a diſagreeable appearance, looking like the body of a ſnake. It will hang ſuſpended by it from the branches, and, by ſwinging its body, throw itſelf among the boughs of the neighbouring trees. It is an inhabitant of Virginia, Louiſiana, Mexico, Braſil, and Peru. It deſtroys poultry, and ſucks the blood

blood without devouring the fleſh: it alſo feeds on roots and wild fruits, and eagerly hunts after birds and their neſts. It walks extremely ſlow, and, when purſued and overtaken, will feign itſelf dead. The female makes a neſt for its young in a buſh or thicket at the foot of a tree, and brings forth four, five, or ſix young at a time.

What diſtinguiſhes the opoſſum from all other animals, and has long excited the wonder of mankind, is a large pouch in the lower part of the belly of the female, in which the teats are lodged, and where the young are ſheltered as ſoon as they are brought forth, and faſten cloſely to the teats. At that time they are blind, naked, very ſmall, and imperfect; it is therefore neceſſary that they ſhould remain there till they attain a perfect form, together with ſtrength, ſight, and hair. When they are grown ſtronger, and venture out, ſtill they run into this pouch, either as into an aſylum in time of danger, or when they are excited by hunger to ſuck, or by fatigue to repoſe. The dam, on ſuch occaſions, opens her bag to receive them; for it has a power

of

of opening and closing at the will of the animal.

The flesh of the old opossum is like that of a sucking pig: the Indian women dye the hair, and weave it into garters and girdles. The skin has a very offensive smell.

THE MARMOSE.

THE marmose resembles the opossum, but is smaller; and, instead of a bag to receive its young, they fix themselves to the teats as soon as they are brought forth, and there remain, like so many inanimate beings, till they attain sufficient strength and vigour to enable them to shift for themselves. On each side of the belly the skin forms a fold, between which are lodged the teats. The young, when first brought forth, are no larger than a bean, but they continue attached to the teat till they are pretty large.

THE CAYOPOLIN.

THE cayopolin is somewhat larger than the marmose, but strongly resembling it both in its figure and its habits.

Its

Its ſnout indeed is ſharper, its tail longer in proportion, and its colour different, being of a lightiſh yellow. It is an inhabitant of the mountains of Mexico. This animal will hang by the tail, which ſerves it alſo inſtead of an hand.

THE PHALANGER.

THIS greatly reſembles the former, but is diſtinguiſhed by the faſhion of its hinder hands, the fore-finger and the thumb being joined together, except at the extremities. The bottom of the tail, for near two inches and an half, is covered with hair, and the other part is naked. This animal is about the ſize of a rat, and has been called by ſome naturaliſts, the rat of Surinam. Its length from noſe to tail is about nine inches, and its tail ten inches. It is a native of Surinam.

THE TARSIER.

LIKE the former, this little animal has four hands, but it differs greatly in the length of its hinder-legs, which are longer than all its whole body beſides. The

nimal has received its name from the xtraordinary length of the bones of hat part of the foot called the tarſus. The tail is naked in the middle and airy at the two extremities. Its hair ſoft and woolly, and of a deep ſh-colour. It is a native of South-merica.

OF ANIMALS OF THE WEASEL KIND.

THE weaſel kind may be diſtinguiſhed from other carnivorous animals, by their long and ſlender bodies, which enable them, like worms, to find into very ſmall openings after their prey. They have indeed received he appellation of vermin, from their reſembling the worm in this particular. n the formation and diſpoſition of their laws, theſe animals differ from all hoſe of the cat kind, as they can neither draw them in nor extend them, as ts are known to do. They are cloathd with fur rather than with hair, and herein differ from the dog kind. All this kind, however, are more diſtinctly marked by their actions and diſpoſitions than by their external forms.

They are all cruel, cowardly, and voracious, ſubſiſting only by theft, and principally protected by their ſmallneſs and inſignificancy. Having ſhort legs, they are all ſlow in purſuit, and obtain a ſupport by cunning, patience, and aſſiduity. Their prey being precarious, they often live a long time without food; but when they meet with ſucceſs, they deſtroy all about them before they begin to feed, and ſuck the blood of every animal before they regale upon its fleſh. The weaſel is the beſt known of any of this kind, and will ſerve as a model for all the reſt; for the particulars in which they differ from this little animal are not very conſiderable.

THE WEASEL.

THE weaſel is the ſmalleſt of this numerous tribe, the length of the head and body not exceeding ſix or ſeven inches. The tail is about two inches and an half long, and ends in a point. The length of this animal, however, appears very great when compared with its height, which does not exceed an inch and an half. The eyes are ſmall and black; the ears

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are large, and the lower parts of them doubled in. The head, tail, legs, and feet, and the upper-part of the body, are of a very pale tawny brown; the lower-part of the body, from the chin to the tail, is white; but on each jaw is a ſpot of brown, beneath the corners of the mouth. It has whiſkers, and thirty-two teeth, which are two more than any of the cat kind have, and they ſeem well adapted both for chewing and tearing.

Though a very diminutive animal, the weaſel is a very formidable enemy to thoſe that are much larger. Like the reſt of its kind, it is very deſtructive to rabbits, poultry, and young birds, and is alſo a great devourer of eggs. It is held in different eſtimation in different parts of the world. It is a moſt noxious animal in thoſe places where lambs are bred; but where agriculture is chiefly followed, the weaſel is conſidered as a friend that deſtroys ſuch vermin as live chiefly upon corn. The weaſel frequents out-houſes, barns, and graineries; where, in order to make ſome atonement for its depredations among our poultry, it preſently clears its haunts from rats and mice, being a

greater enemy to them than even the cat itſelf.

This is an untameable and untractable creature. When kept in a cage, either for amuſement, or inſpection, it will not touch its victuals if any perſon looks on. It ſeems continually agitated, and ſo terrified at the ſight of mankind, that, if not permitted to hide itſelf from their view, it will even expire. It muſt therefore have a ſufficient quantity of wool or hay in its cage, under which it may conceal itſelf, and whatever it has to eat. It paſſes three parts of the day in ſleeping, and employs the night in exerciſe and eating.

At the approach of evening, this animal, in its wild ſtate, is ſeen ſtealing from its hole, and creeping about the farmer's yard in ſearch of prey. If it enters the place where poultry are kept, it never attacks the old cocks and hens, but aims immediately at the young ones. It does not eat its prey on the ſpot, but, after killing it, carries it off to its young or its retreat. This creature is remarkably active; and, in a confined place, ſcarce any animal can eſcape it. The ſides of walls it will run

up

up with ſuch facility, that few places are ſecure from it; and its body is ſo ſlender, that there is hardly a hole but what is pervious to it. In winter this animal chiefly confines itſelf to barns and farm-yards: all this ſeaſon it makes war upon rats and mice; it creeps alſo into pigeon-holes, and deſtroys the young. It ventures farther from the houſe in ſummer, and particularly into thoſe places where the rat goes before it: it is found principally in the lower grounds, by the ſide of waters, and near mills, and frequently conceals its young in the hollow of a tree.

The female makes an excellent bed for her little ones, of which ſhe generally brings forth four or five at a time: like thoſe of the dog kind, all theſe animals bring forth their young blind, but they ſoon acquire ſufficient ſtrength to accompany the dam in her excurſions, and to be accomplices in her petty thefts. This animal, as well as all thoſe of its kind, has a very ſtrong offenſive ſmell, proceeding from the fætid glands beneath the tail. The weaſel ſmells ſtronger in ſummer than in winter, and ſtill more abominably when irritated or purſued. It has no cry, ex-

cept when it is ſtruck, and then it expreſſes its reſentment and pain by a kind of ſqueak.

THE STOAT OR ERMINE.

THE difference between the ſtoat and weaſel is ſo very inconſiderable, that many naturaliſts, and among the reſt Linnæus, have confounded the two kinds together: the ſtoat, or ermine, however, differs from the weaſel in ſize, being uſually nine or ten inches long; and the former ſeldom exceeding ſix or ſeven. The tail of the ermine is always tipped with black, has more hair, and is longer in proportion to the body. This animal indeed, like the weaſel, is of a lightiſh brown, and, like the weaſel in the moſt northern parts of Europe, changes its colour in winter, and becomes white; but ſtill the weaſel may be diſtinguiſhed from the ermine by the tip of its tail, which is always black.

The ermine is remarkable for the ſoftneſs, the cloſeneſs, and the warmth of its fur, which is the moſt valuable of any hitherto known. The ſkins and tails are a very valuable article of commerce in Norway, Lapland, Ruſſia, and

and other countries, where they are found in prodigious numbers. The ſtoat is ſometimes found white in Great-Britain, but not often; and then it is called a white weaſel. The ermine is obſerved to begin to change its colour from brown to white in November, and to reſume the brown the beginning of March *.

It is not eaſy to account for the remarkable warmth of the furs of northern quadrupeds. Nature, it may be ſaid, fits them thus for the climate; and, like an indulgent mother, when ſhe expoſes them to the ſevereſt rigours of winter, ſupplies them with a covering, to ſhield them from its inclemency: but how does nature furniſh them in this manner? It is obſervable in many animals, that a thin ſparing diet produces a quantity of hair: children, dogs, and horſes, that have been ill fed, are more hairy than thoſe whoſe food has been more plentiful. This may therefore be one cauſe that, in winter, the animals of the north are more hairy than thoſe of the milder climates. The whole country is then covered with deep

* Phil. Tranſ. N° 337.

ſnow,

ſnow, and what the ermine can procure muſt be ſcanty and precarious. The ſeverity of the cold alſo contracts the pores of the ſkin, and the hair naturally takes the ſhape of the aperture through which it grows, as wire is made ſmaller by being drawn through a ſmaller orifice. It is however certain that moſt of the animals of the artic climates have garments adapted to the winter as well as to the ſummer.

This animal reſembles the weaſel in its habits, and its choice of food; but does not frequent houſes. Its haunts are woods and hedges, eſpecially ſuch as border on brooks or rivers. Its agility is equal to that of the weaſel, and its ſcent is equally fœtid.

THE POLE-CAT.

THE pole-cat is larger than the weaſel or the ermine, being about ſeventeen inches in length, excluſive of the tail, which is ſix. It is a deep chocolate colour, has a ſpace of white round the mouth; the ears are ſhort, rounded, and tipped with white. It ſo nearly reſembles the ferret in form, that many have ſuppoſed them to be the ſame animal.

Opossum
Lesser Otter
Polecat
Brasilian Weasel

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mal. Like the whole genus, it is long and ſlender, nimble and active, and will creep up the ſides of walls with great agility. Like the reſt of the tribe, the pole-cat is very deſtructive to poultry of all kinds: it alſo makes a common practice of robbing the dairy, and is a formidable enemy to pigeons; but the rabbit ſeems to be its favourite prey; a ſingle pole-cat is almoſt ſufficient to deſtroy a whole warren, for it has ſuch an inſatiable thirſt for blood, that it kills much more than it can devour. The female brings forth about five or ſix at a time. Warreners aſſert that the pole-cat will mix with the ferret, and that they frequently procure an intercourſe between theſe animals, to improve the breed of the latter; which becomes leſs eager after rabbits, and conſequently leſs uſeful, by being long confined. Mr. Buffon denies that the ferret will admit the pole-cat, yet gives a variety under the name of the ferret-pole-cat *, which has the appearance of being a ſpurious offſpring. In many reſpects, the ferret agrees with the pole-cat, particularly in its thirſt after the

* La Furet Putois, tom. VII. tab. 25.

blood

blood of rabbits. When alive, the ſmell of the pole-cat is rank and diſagreeable even to a proverb; the ſkin is nevertheleſs dreſſed with the hair on, and uſed for tippets, &c. like other furs.

THE FERRET.

THIS animal is a kind of domeſtic in Europe. It is a native of Africa in its wild ſtate, from whence it was originally brought into Spain, in order to free that country from the multitudes of rabbits with which it was overrun; and from thence the reſt of Europe was ſupplied with it. It has a very ſharp noſe, red and fiery eyes, and round ears. The colour of the body is a pale yellow, but it is alſo found of all the colours of the weaſel kind; white, black, brown, and party-coloured. It alſo reſembles the weaſel in the ſlenderneſs of its body and the ſhortneſs of its legs. It is a lively active animal, and the natural enemy of rabbits; it ſucks the blood of its prey, but very ſeldom tears it. Ferrets breed in our climate, and bring from five to nine at a time; but they are apt to degenerate and loſe their ſavage nature, till an intercourſe can be

be procured between the ferret and the pole-cat, which in ſome degree reſtores the former to its natural ferocity. The ferret has the ſame diſagreeable ſmell as the pole-cat.

The ferret is not at preſent to be found in Great-Britain, except in its domeſtic ſtate; and it is kept tame, entirely for the purpoſes of the warren. The chief uſe of a ferret is to enter the holes of the rabbits, and drive them into the nets that are prepared for them at the mouth. For this purpoſe it is muzzled, or, inſtead of driving the animal out, it would only kill it and ſuck its blood: but, by this contrivance, the rabbit eſcapes from the ferret, and precipitately runs to the mouth of the hole, where it is entangled in the net provided for that purpoſe. Sometimes indeed it happens that the ferret diſengages itſelf of its muzzle, when it is uſually loſt, unleſs it be dug out; for, finding all its wants ſupplied in the warren, he continues there during ſummer, and in the winter periſhes with cold.

Theſe animals are uſually kept in boxes, like rabbit-hutches, and are furniſhed with wool, of which they make them-

themſelves a warm bed to defend them from the rigour of the climate. The ferret is an uſeful, but a diſagreeable and offenſive animal. Its ſcent is fœtid, and its nature voracious: it is tame without any attachment, and has ſo ſtrong an appetite for blood, that it has been known to kill infants in the cradle. It is eaſily irritated, and then its ſmell is uncommonly offenſive, and its bite is not to be cured but with great difficulty.

The MARTIN

THE martin differs from the polecat, in being about four or five inches longer; its tail is alſo longer in proportion, and more buſhy at the end. It is a beautiful little animal; its head is ſmall and elegantly formed; its eyes are lively; and its colours are elegant: the back, ſides, and tail, are covered with a fine thick down, with long hair intermixed; the bottom is aſh-coloured; the middle of a bright cheſnut colour, and the tips black; the head is of a reddiſh brown; the throat and breaſt are white; the belly of the ſame colour with the back, but rather paler; the

the hair of the tail is very long, eſpecially at the top, where it appears thicker than near the inſertion. But theſe animals vary in their colours, inclining more or leſs to aſh-colour, according to their ages or the ſeaſons of the year.

All the motions of the martin diſplay grace as well as agility: it is eaſily tamed, and when taken young is extremely playful, being continually in good humour. If it happens to get looſe, it is not ſo ſtrongly attached to its maſter, but it will take the advantage of its liberty, and retire to its proper haunts. It makes terrible havock among poultry, game, &c. and will deſtroy rats, mice, and moles. In this country it inhabits woods, and makes its bed in the hollow of trees.

The ſcent of this animal, inſtead of being offenſive, is conſidered as a moſt pleaſing perfume. The ſkin of the martin is a valuable fur, and is much uſed for linings to the gowns of magiſtrates.

There is a variety of this animal, called the yellow-breaſted martin, which differs from the former only in having a yellow breaſt; the breaſt of the other

being white. It inhabits large foreſts, eſpecially thoſe of pines, and its prey is the ſame as the former, but its fur is much more valuable.

THE SABLE.

THE ſable reſembles the martin both in form and ſize, and the weaſel in the number of its teeth; the martin having thirty-eight teeth, and the weaſel but thirty-four; therefore, in this reſpect, the ſable ſeems to make the ſhade between theſe two animals. It has long whiſkers, rounded ears, large feet, white claws, and a long buſhy tail. The ſkin of the ſable is the moſt coveted, and held in the higheſt eſteem of any of the furs of this tribe of animals. It is of a browniſh black, and the darkeſt is the moſt valuable: a ſingle ſkin being often ſold for ten or fifteen pounds*. But the fur, which is ſo valuable, is not always the ſame. Some of theſe ſpecies are of a dark brown all over the body, except the ears and the throat, where the hair is yellowiſh; and there are inſtances of their being found of a ſnowy

* Regnard.

white-

whiteneſs. The ſable reſembles the reſt of the weaſel kind in vivacity and agility, in ſleeping by day, and ſearching for their prey by night, and in the diſagreeable odour by which that race is chiefly characterized. Theſe animals inhabit Siberia and Kamtſchatka, and ſome few of them are found in Lapland. They uſually live in holes in the earth, or beneath the roots of trees; and ſometimes, like the martin, they form their neſts in the trees, and will ſkip from one to the other with great agility. They bring forth about the end of March, or the beginning of April, and produce from three to five at a time, which they ſuckle about a month *.

Theſe animals are hunted in the winter for their ſkins, as they are only then in ſeaſon. In Siberia, the hunting of the ſable chiefly falls to the lot of the condemned criminals, who are ſent from Ruſſia into thoſe dreary and inhoſpitable foreſts; and thus the luxuries and ornaments of the vain, are obtained by the miſeries of the wretched. Theſe criminals are obliged to furniſh a

* Hiſt. Kamtſchatka, 109.

certain number of ſkins annually, or receive puniſhment in proportion as they fall ſhort of the limited quantity. The ſable is alſo killed by the Ruſſian ſoldiers, who are ſent into Siberia for that purpoſe. Like the criminals, they are taxed a certain number of ſkins yearly, but, as an encouragement, they are permitted to ſhare among themſelves the ſurplus of the ſkins which they thus procure.

THE GUINEA WEASEL.

THIS animal is about the ſize of a rabbit, of a duſky colour, and its form is like that of a rat. Its upper jaw is much longer than the lower, and its eyes are placed about the mid-way between the ears and the tip of the noſe. Its ears are like human ears, and it has a remarkable rough tongue. It inhabits Guinea, and is very common about the negro ſettlements. It burrows like a rabbit, and is ſo fierce, that if provoked, it will fly at either man or beaſt.

THE

THE ICHNEUMON.

THE ichneumon is uſually of the ſize of the martin, and greatly reſembles it, except that the hair, which is generally of a griſly black, is rougher and leſs downy; though the colour is various in different animals from different countries. The tail is leſs buſhy at the end than that of the martin, and every hair has three or four colours, which are ſeen in different diſpoſitions of its body.

This animal, which is alſo called the rat of Pharaoh, has all the ſtrength, agility, and inſtinct of a cat; it has a more univerſal appetite for carnage, and a greater variety of methods to procure it. Every living creature which it is able to overcome, it ventures to attack, and preys upon every kind of fleſh. Neither the ſtrength of the dog, nor the malice of the cat, can terrify it; neither the claws of the vulture, nor the poiſon of the viper, can intimidate it; fearleſs of their venom, it makes war upon all kinds of ſerpents, and when it perceives the effects of their rage, it obtains an antidote from

a certain root, which the Indians call by its name, after which it returns to the attack, and ſeldom fails of victory. Rats, mice, birds, ſerpents, lizards, and inſects, are all equally purſued by this animal; but it is particularly ſerviceable to the Egyptians, as it is a great deſtroyer of the eggs of crocodiles, which it digs out of the ſand, and even kills multitudes of the young of thoſe terrible reptiles, before they have been able to reach the water. It is even ſaid, that when it finds a crocodile ſleeping on the ſhore, it boldly enters the mouth of that animal, attacks the enemy in the inſide, and, when it has effectually deſtroyed it, eats its way out again.

The eyes of this animal are ſprightly and full of fire, and its phyſiognomy ſenſible. Like the reſt of its kind, it has glands that open behind, and furniſh an odorous ſubſtance. It will take the water like an otter, and continue longer under it. It is found in Egypt, Barbary, India, and its iſlands. It is at preſent domeſticated, and kept in houſes in Egypt and India, where it is more uſeful than a cat in deſtroying rats and mice. It grows very tame,

and

and will ſit up like a ſquirrel, feeding itſelf with its fore-feet, and catching any thing that is thrown to it. Lucan beautifully deſcribes the addreſs of the ichneumon in ſubduing the Egyptian aſp.

> Aſpidas ut Pharias cauda ſolertior hoſtis
> Ludit, et iratas incerta provocat umbra:
> Obliquans que caput vanas ſerpentis in auras
> Effuſæ toto comprendit guttura morſu
> Letiferam citra ſaniem: tunc irrita peſtis
> Exprimitur, fauceſque fluunt pereunte veneno.
>
> Lib. IV. p. 724.

The inhabitants of Heracleopolis paid divine honours to the ichneumon, as to a gracious being, becauſe this little animal is continually ſeeking the eggs of crocodiles, to break them. "And, what is extraordinary," ſays Diodorus, "it never eats them, and thus appears condemned by nature to a labour, the utility of which extends only to man. If it did not take that care, the river would be inacceſſible to mankind, by reaſon of the multitude of crocodiles with which the banks would be ſurrounded. The ichneumon kills the crocodiles themſelves by a piece of craft altogether ſingular, and which

which is ſcarce credible. Whilſt the crocodile ſleeps on the ſhore, with its mouth open, the ichneumon, after rolling itſelf in the mud, enters on a ſudden into its body; there it devours its entrails, and afterwards comes out, without danger, from the belly of the animal, whom it leaves dead." The ichneumon was conſecrated to Latona and Lucina.

THE SQUASH.

THE upper jaw of this animal is much longer than the lower; its ears are rounded, and its hair pretty long, hard, and upright. It is varied with black and white, and has only four toes on each foot before, though all other weaſels have five.

THE STIFLING WEASEL.

THIS animal has a ſhort ſlender noſe, ſhort ears and legs, and its body is black and full of hair. Its tail, which is long, is black and white. Its length, from the noſe to the inſertion of the tail, is about eighteen inches. It is a native

native of Mexico, and probably ſome other parts of America.

This animal, the conepate of Buffon, the ſkunk, the zorilla, and fizzler, are all remarkable for the peſtiferous, ſtinking, and ſuffocating vapour they emit from behind, when attacked, purſued, or terrified. It is indeed their only means of defence. Some turn their tail to their enemy, and emit a horrid effluvia, and others ejaculate their urine to a very conſiderable diſtance: the terrible ſtench immediately ſtops the purſuers, and, if any of this liquid ſhould happen to fall into the eyes, it almoſt occaſions blindneſs; if on the cloaths, the ſmell will continue for ſeveral days, and cannot be removed by waſhing; they muſt even be buried in freſh earth in order to be ſweetened. Dogs that have been uſed to hunt this animal will kill it, but others run back as ſoon as they perceive the ſmell. Even thoſe dogs which have been accuſtomed to them are obliged to relieve themſelves, by frequently thruſting their noſes into the ground. Profeſſor Kalm ſays, he was in danger of being ſuffocated by one that was purſued into a houſe where he ſlept; and the

the cattle were ſo much affected, that they bellowed through pain. Another, which was killed by a woman in a cellar, ſo affected her with its ſtench, that ſhe kept her bed for ſeveral days after, and all the meat, and other proviſions that were kept there, were ſo infected, that the owner was obliged to throw them away. Notwithſtanding this, the Americans eat its fleſh, which they reckon good food; but they are careful to deprive it of thoſe glands which are ſo abominably offenſive.

The Virginian ſpecies is capable of being tamed, and will follow its maſter like a dog, and never emits its vapour except it is injured or frighted.

In other reſpects, the ſquaſh, the conepate, the ſkunk, the zorilla, and the fizzler, do not materially differ. The ſquaſh is about the ſize of a polecat, and its hair is of a deep brown; but, as already obſerved, it has only four toes on each foot. The ſkunk alſo reſembles a polecat in ſhape and ſize, but its colour is partly black and partly white, variouſly diſpoſed over the body; and the hair is very long, gloſſy, and beautiful. Mr. Buffon ſuppoſes the conepate and the zorilla to be

be the ſame; and indeed it appears needleſs to make a diſtinction, as they perfectly reſemble each other, except in ſize; the conepate being ſomewhat ſmaller. The zorilla reſembles the ſkunk, but is ſmaller, and more beautifully coloured, its ſtreaks of black and white being more diſtinct and regular.

THE CIVET.

LIKE the reſt of the weaſel kind, the civet has a long ſlender body, ſhort legs, and an odorous matter exuding from the glands behind. It alſo reſembles the reſt of the tribe in the ſoftneſs of its fur, the number of its claws, and their incapacity of being ſheathed; but it differs from them in being much larger than any of thoſe which have already been deſcribed; its length from noſe to tail being about two feet three inches, the tail fourteen inches, and the body pretty thick. It has a long noſe like that of a fox. The colour of the civet varies, but it is uſually aſh ſpotted with black; though in the female it is whiter and tending to yellow, and the ſpots are much larger,

larger, like thoſe of the panther: the civit has whiſkers, like the reſt of its kind, and its eyes are black and beautiful.

This animal inhabits India, the Philippine iſlands, Guinea, Æthiopia, and Madagaſcar. The famous drug muſk, or civet, is produced from an overture between the privities and the anus, in both ſexes, ſecreted from certain glands. Thoſe who keep them, provide for them a box for an habitation, and procure the muſk by ſcraping the inſide of the box about twice or three times a week with an iron ſpatula, and get about a dram each time. But it is difficult to get it pure, being generally mixed with ſuet or oil, to add to the weight. The male yields the moſt, eſpecially if it be previouſly irritated. When young, they are fed with pap made of millet, and a little fleſh or fiſh, and, when old, they are fed principally with raw fleſh. In a wild ſtate they prey on fowl.

Though the civet is a native of the warmeſt climates, it will live in temperate, and even cold climates, if carefully defended from the injuries of the weather. Great numbers of theſe animals

mals are bred in Holland, where no inconsiderable advantage is made of its perfume. The musk of Amsterdam is reckoned the best of any, it being less adulterated than that of any other country.

The perfume of the civet is so strong that it communicates itself to every part of the animal's body; even the fur and the skin preserve their odour long after they are taken from the body; the perfume of this animal is so copiously diffused, as to be insupportable when shut up in a close room with it. Like all the weasel kind, the scent of this animal, when irritated, is much more violent than ordinary.

The civet is a fierce animal, and though capable of being tamed, in some degree, is never thoroughly familiar. In their native climates they breed very fast; but, in our temperate latitudes, though they furnish great quantities of their perfume, they are not known to multiply.

This species is distinguished by Mr. Buffon into two kinds, one of which he calls the civet, and the other the libet, but their similarity is so great in every particular, we shall (like all

other naturaliſts except Mr. Buffon) conſider theſe two merely as varieties of the ſame animal, a little altered by climate, food, or education.

It does not appear that the civet was known to the ancients, and it is probable they purchaſed the drug without knowing its origin; for it is certain that perfumes were uſed by the fine gentlemen at Rome. *Paſtillos Rufillus olet*, HOR. *Rufillus ſmells of perfume*, HOR.

THE GENET.

THE genet is uſually ſomewhat ſmaller than the martin, and reſembles all thoſe of the weaſel kind, in its length, compared to its height: it alſo reſembles them in having a ſoft beautiful fur, in having its feet armed with claws that cannot be ſheathed, and in its appetite for carnage; but it differs from them in having the noſe much ſmaller and longer, reſembling that of a fox: the tail, inſtead of being buſhy, tapers to a point, and is much longer. Its paws are ſmaller, and its ears larger. The genet is a beautiful animal, ſpotted with black, upon a ground mixed with red

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Fossane
Squash
Civet
Otter

red and grey. It has two ſorts of hair, the one ſhorter and ſofter, and the other longer and ſtronger. Upon the ſides, its ſpots are diſtinct and ſeparate, but unite towards the back, and form black ſtripes. It has a kind of mane the whole length of the back, forming a black ſtreak from the head to the tail; and the tail has alternate rings of black and white, from the inſertion to the end.

This animal is an inhabitant of Turkey, Syria, and Spain, and frequents the banks of rivers. It ſmells faintly of muſk, and, like the civet, has an orifice beneath the tail. It is eaſily tamed, and, in the houſes of Conſtantinople, is permittted to run about like a cat, and is as uſeful as that animal in catching mice.

THE FOSSANE.

IT has a ſlender body, covered with aſh-coloured hair, mixed with tawny: four black lines extend from the hind-part of the head towards the back and ſhoulders: the ſhoulders, ſides, and thighs are black, and it has regular rings of black the whole length of its

tail. It inhabits Madagaſcar, Guinea, and the Philippine iſles. It is fierce, and almoſt untameable: it deſtroys poultry, and, when young, is reckoned excellent food.

THE OTTER.

THE otter is an amphibious animal, reſembling thoſe of the terreſtrial kind in ſhape, hair, and internal conformation; and reſembling the aquatic tribes in the manner of living, and in having membranes or webs between the toes to aſſiſt it in ſwimming. From this peculiar make of its feet, it ſwims faſter than it runs, and can overtake fiſhes in their own element. It has a black noſe, and long whiſkers; the eyes are very ſmall, and placed nearer the noſe than in other animals; the upper-jaw is longer and broader than the lower; the ears are ſmall, erect, and conic: the hair is long and thick. The colour ſometimes varies to ſilvery: the legs are very ſhort, but remarkably ſtrong, broad, and muſcular; the toes are covered with hair, and joined by a web. The joints are ſo looſely articulated, that the otter is capable of turning them

them quite back, and bringing them on a line with the body, ſo as to perform the offices of fins. The length of this animal, from noſe to tail, is uſually about twenty-three inches; and its tail, which is flat and ſharp-pointed, and fulleſt of hair in the middle, is about thirteen inches.

This animal is found only at the ſides of lakes and rivers, and greatly prefers the former, not being fond of fiſhing in a running ſtream; for if it hunts againſt the ſtream, it ſwims too ſlow, and if with the current it over-ſhoots its prey; but, in rivers, it always ſwims againſt the ſtream, chooſing rather to meet the fiſhes it preys upon than to purſue them. The otter makes terrible havock in a lake or pond, where it deſtroys much more than it can devour, and, in the ſpace of a few nights, will ſometimes entirely ſpoil a pond. They are very injurious to fiſhermen, as they never fail to tear their nets in pieces whenever they happen to be entangled.

Though the otter is furniſhed with a ſupply much greater than its conſumption in ſummer, and frequently kills for its amuſement, leaving quantities of dead fiſh on the margin of the lake, rather as

trophies of its victory than of its wants; yet, in winter, when the lakes are frozen over, and the rivers roll in a rapid torrent, this animal is greatly diſtreſſed, and is obliged to content itſelf with graſs, weeds, and the bark of trees. Grown courageous from hunger, it comes upon land, and feeds upon rats and inſects, and, ſome ſay, even upon ſheep.

In forming its habitation, the otter ſhews great ſagacity; it burrows under ground on the banks of ſome river or lake, and the extreme of its hole is always under water. It works upwards to the ſurface of the earth, and there makes a ſmall orifice for the admiſſion of air. The otter brings forth four or five young at a time, and, as it frequents ponds near gentlemen's houſes, litters of them have ſometimes been found in cellars, ſinks, and other drains.

The colour of this animal is a deep brown, except two ſmall ſpots of white on each ſide of the noſe, and another under the chin. The ſkin, if the animal is killed in winter, is very valuable, and is much uſed by the inhabitants of cold countries for lining to their cloaths; but, in England, it is ſeldom uſed

uſed for any thing but covers for piſtol furniture. The beſt furs of this kind are found in the northern part of Europe and America. The fleſh of this animal is extremely rank and fiſhy. To take the old ones alive is no eaſy taſk, as they are extremely ſtrong, and few dogs will venture to encounter them: they bite with great vehemence, and when they have once faſtened will never quit their hold.

This animal inhabits all parts of Europe, north and north-eaſt of Aſia, and abounds in North-America, particularly in Canada. It is capable of being tamed, when it will follow its maſter like a dog, and even fiſh for him.

THE LESSER OTTER.

THIS animal is about three times as ſmall as the common otter, though reſembling it in form: it has roundiſh ears, a white chin, and a hoary head; though the hair of ſome are tawny. Its body is tawny and duſky; the ſhort hair being yellowiſh, and the long hair black: the feet are broad, webbed, and covered with hair. The tail is duſky,

and

and ends in a point. It is a native of Poland, and the north of Europe; and lives on fiſhes, frogs, and water-inſects: its fur is in great eſteem, and next in beauty to that of the ſable. The ſkins are often brought over to England. It is a ſtinking animal, and is caught with dogs and traps. This animal is the ſame as the minx of America. Lawſon * ſays it is a great enemy to the tortoiſes, ſcraping their eggs out of the ſands and devouring them. It eats freſh-water muſcles, the ſhells of which are found in great abundance at the mouth of their holes, high up in the rivers, on the margin of which they live. It may be domeſticated, and is a great deſtroyer of rats and mice.

THE SEA OTTER.

THE upper-jaw of this animal is longer and broader than the lower: it has a black noſe, and long white whiſkers: its ears are ſmall, erect, and conic; and in each jaw are four cutting-teeth: the grinders are broad, and adapted for breaking cruſtaceous animals and ſhell-

* Hiſt. Carolina, p. 122.

fiſh,

ſh. The hair is thick, long, black, and gloſſy; beneath which there is a ſoft down. Its legs are thick and ſhort; the toes are covered with hair and joined by a web. The hind-feet are like thoſe of a ſeal, and have a membrane ſkirting the out-ſide of the exterior toe, like that of a gooſe. It is about four feet two inches long from the noſe to the inſertion of the tail; and the tail, which is flat and ſharp pointed, is about two inches. One of theſe animals is ſometimes found to weigh ſeventy or eighty pounds.

Sea otters are very numerous on the coaſts of Kamſtchatka, and thoſe parts of America oppoſite to it, which were diſcovered by the Ruſſians. They are alſo in the Braſilian rivers, and that of Oronoque. They are inoffenſive animals, and ſo remarkably affectionate to their young, that, at the loſs of them, they will pine to death, on the very ſpot where they have been taken from them. Before the young can ſwim, the old animals carry them in their paws, lying in the water on their backs. They are very ſportive, and chiefly inhabit the ſhallows, where plenty of ſea-weeds are to be found.

They

They feed upon lobſters and other fiſh. They breed once a year, and bring forth but one at a time, which is depoſited on ſhore. Theſe animals are hunted for their ſkins, which are very valuable; and the fleſh of their young is reckoned very delicate food, equal if not ſuperior to that of lamb.

THE CAVY.

IN England this animal is called a Guinea-pig, and by Buffon the Indian-pig. Its ears are large, broad, and rounded at the ſides; its upper-lip is half divided, and its hair is erect, ſomewhat reſembling that of a young pig. The colour is white, or white varied with orange, and black in irregular blotches. It has four toes on the fore-feet, and three on the hind-feet, but is without a tail. It is a native of Braſil, but writers have given no account of it in its wild ſtate. It is become domeſtic in Europe, and is a reſtleſs, grunting little animal, continually running from corner to corner; and feeds on bread, vegetables, and grains. It breeds at the age of two months, and brings from four to twelve at a time. It is a prolific

prolific creature, and breeds every two months. Theſe animals would be innumerable, if ſome were not deſtroyed by cats and others killed by the males; and if they were not alſo very tender animals, and periſhing frequently with cold. Rats, it is ſaid, avoid the haunts of this creature.

THE ROCK CAVY.

THIS animal is about a foot in length, has a divided upper-lip, ſhort ears, four toes on the fore-feet, and three on the hind, and, like the former, is without a tail. The upper part of the body is of the colour of the common hare, and its belly is white. It is a native of Braſil, and lives in the holes of rocks. It is hunted by little dogs, and the fleſh of it is ſuperior in flavour to that of our rabbits. Its paces are like that of a hare.

THE SPOTTED CAVY, OR HOG-RABBIT.

THE ſpotted cavy has five toes upon each foot, and only the meer rudiment of a tail. The upper-jaw is longer than the

the lower, and the ears ſhort and naked. It has long whiſkers, and the upper-part of the body is of a dark brown colour; the ſides are marked lengthways with lines of grey ſpots, and the belly is white. It is about ten inches long, and its form is like that of a pig. It inhabits Braſil and Guinea, chiefly in fenny places, and burrows underground. It grunts like a pig, and will bite ſeverely. It grows very fat, and is reckoned a great delicacy in Braſil. On the banks of the river St. Francis, a variety of this ſpecies is found which is entirely white *.

THE LONG-NOSED CAVY.

THIS animal is about the ſize of a rabbit, has a long noſe, a divided upper-lip, ſhort rounded ears and black eyes. The hair is hard and ſhining, is a mixture of red, brown, and black; of a bright orange colour on the rump, and yellow on the belly. It has black ſlender legs, four toes on the fore-feet, and three on the hind, and a ſhort naked tail. This is alſo a native of

* Dampier, III. 401.

Braſil,

Braſil, and Guiana, and is a voracious little animal. It grunts like a pig, and, ſitting on its hind legs, holds its food with the fore-feet when it eats; and what it cannot devour it conceals. It goes very faſt, and its motions are like thoſe of a hare. When purſued, it uſually takes ſhelter in an hollow tree. When irritated, its hair briſtles on its back, and it ſtrikes the ground with its feet. Its fleſh is eaten by the inhabitants of South-America. This animal is capable of being tamed.

There is a ſpecies leſs than the above, and of an orange colour, and another which inhabits Java and Sumatra, about the ſize of a hare, and of a reddiſh colour.

THE CAPE CAVY.

THE length of this animal is about ten inches. It has a thick head, full cheeks, and oval ears, which are almoſt hid in the fur. The head is of the colour of a hare, and the top of the back duſky, mixed with grey; the ſides and belly are of a whitiſh grey; and the ſhape of the body is thick and clumſy. It has four toes on the fore-

feet, and three behind. The tail i hardly viſible. It inhabits the moun tains near the Cape of Hood-Hope and burrows under ground like a rab bit. It is eſteemed very good meat b the inhabitants of that part of th world.

THE MUSK CAVY.

THIS animal is almoſt as large a a rabbit; the upper-part of its bod is of a black colour, and its bell white. It burrows like a rabbit, an inhabits Martinico, and the reſt of th Antilles. It ſmells ſo ſtrong of muſk that it may be purſued by its per fume.

THE HARE.

THE hare is one of the moſt per ſecuted and moſt timorous of animals being a weak and defenceleſs creature it is endued, in a remarkable degree with that preſerving paſſion, fear: thi makes it perpetually attentive to ever alarm, and keeps it continually lean To enable it to receive the moſt diſtan notices of danger, nature has provided i wit

Siberian Hare

Russian Rabbit

Beaver

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with very long ears, which, like the tubes applied to the ears of deaf people, convey to it thoſe ſounds which are remote, and the animals motions are directed accordingly. It has large prominent eyes, placed backwards in its head, and ſo adapted as to receive the rays of light on every ſide; ſo that, while it runs, it can almoſt ſee behind. The eyes of this animal are never wholly cloſed; it is ſo continually on the watch, that it even ſleeps with them open. The muſcles of the body are ſtrong and without fat; it has therefore no ſuperfluous burthen of fleſh to carry. To aſſiſt it to eſcape its purſuers, the hind-legs are formed remarkably long, which ſtill adds to the rapidity of its motion; and ſo ſenſible is the animal of this peculiar advantage, that, when it is ſtarted, it always makes towards the riſing ground.

The various ſtratagems and doubles it uſes, when hunted, are ſo univerſally known that it would be ſuperfluous to enumerate them. It might reaſonably be ſuppoſed that an animal ſo well formed for a life of eſcape, might enjoy a ſtate of tolerable ſecurity, but its enemies are ſo numerous, that it ſel-

dom lives out its natural term. Dogs of all kinds purſue it by inſtinct. The cat and the weaſel kinds exerciſe all their little arts to ſeize it. Birds of prey, ants, ſnakes, and adders drive them from their forms, particularly in ſummer; but man, its moſt powerful enemy, deſtroys greater numbers than all the reſt. They are hunted by the ſportſman, ſhot at by the poacher, and caught in ſprings by the farmer. Perſecuted thus on every ſide, did it not find a reſource in its amazing fertility, the whole race would long ſince have been extirpated.

This animal ſeldom leaves its form in the day, but takes a circuit in ſearch of food in the night. The colour of a hare approaching very near to that of the ground, it is on that account more effectually ſecured from the ſight of men, and of beaſts and birds of prey. In northern countries, Providence has been ſo careful to preſerve theſe and many other animals, as to cauſe them to change colour and become white at the beginning of winter, to render them leſs conſpicuous amidſt the ſnow. Their natural inſtincts for their preſervation are indeed very extraordinary:

nary: they make themſelves a form, or bed, in thoſe places where the colour of the graſs moſt reſembles their ſkin; it is open to the ſouth in winter, and to the north in ſummer.

The hare multiplies exceedingly, and breeds when it is only a few months old; the female goes thirty days with young, and uſually brings but two at a time, though ſometimes three or four. Sir Thomas Brown * and Mr. Buffon † aſſert the doctrine of ſuperfetation, or conception upon conception; but, as the hare breeds frequently in the courſe of a year, their numbers may be accounted for without yielding implicit credit to this aſſertion. The young of the hare is brought forth with their eyes open, and they are ſuckled by the dam for twenty days; after which they leave her, and begin to ſhift for themſelves; ſo that the family connection of theſe animals is but of ſhort duration.

The food of the hare is entirely vegetable; they live upon graſs, roots, leaves, fruits, and corn, and prefer

* Brown's Vulgar Errors, 118.
† Buffon, vol. XIII. 12.

thoſe plants which ſupply a milky juice: they do great injury to nurſeries of young trees, by eating the bark off; ſcarce any tree comes amiſs to them, except the lime or the alder: they are remarkably fond of pinks, parſley, and birch.

Theſe animals ſeldom live above ſeven or eight years; in our climate, they paſs their lives in ſolitude and ſilence; and they ſeldom are heard to cry, except when they are ſeized or wounded. Though apparently wild, they are of a complying nature, and eaſily tamed: they even become fond and careſſing, but are incapable of forming any particular attachment; and, though taken ever ſo young, they embrace the firſt opportunity to regain their ancient freedom. The hares of the hot countries, particularly in Barbary, Spain, and Italy, are ſmaller than ours: the beſt in Europe are ſaid to be bred in the Milaneſe. They inhabit every part of Europe, moſt parts of Aſia, Japan, Ceylon, Egypt, Barbary, and North-America.

The fur of the hare is of great uſe in the hat manufacture, and as this country cannot ſupply a ſufficient number,

ber, many thouſands of the ſkins are annually imported from Ruſſia and Siberia. In the laſt mentioned country they aſſemble in great troops of four or five hundred. The hare was thought a great delicacy among the Romans, though it was forbidden among the Britons. The fleſh of it is now much eſteemed by the inhabitants of Great-Britain.

The animal called a hare by our voyagers to Patagonia, is at preſent of a doubtful genus.

THE RABBIT.

THOUGH the hare and the rabbit nearly reſemble each other in form and diſpoſition, they are diſtinct kinds, and refuſe to mix with each other. Mr. Buffon kept ſeveral of both kinds in the ſame place; but, from being at firſt indifferent, they preſently became enemies, and often fought till one of the contending parties was either diſabled or deſtroyed. It is however aſſerted by ſome naturaliſts, that an animal is often produced between theſe two, which, like the mule, is marked with ſterility.

Pliny

Pliny judiciouſly remarks that "Nature has ſhewn great kindneſs, in cauſing thoſe things to be moſt prolific, that are the moſt harmleſs, and the propereſt for our food." This obſervation is finely illuſtrated in the great fruitfulneſs of this animal. Rabbits will breed ſeven times a year, and perhaps bring eight young ones every time: on a ſuppoſition that this happens regularly for four years, a pair will in that time multiply to one million, two hundred ſeventy-four thouſand, eight hundred and forty. From this calculation, we might juſtly be afraid of being over-ſtocked with theſe animals, if their numbers were not diminiſhed by every beaſt and bird of prey, and particularly by man himſelf. But, notwithſtanding they have ſo many enemies, Pliny and Strabo inform us *, that they were once ſo great a nuiſance to the inhabitants of the Balearic iſlands, that, in the time of Auguſtus, they implored the aſſiſtance of a military force from the Romans, in order to extirpate them. Spain is their native country, where they are taken by ferrets as they

* Plin. lib. VIII. c. 55. Strabo, lib. III.

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are with us. They like a temperate climate, and cannot endure much cold; ſo that in Sweden they are obliged to be kept in houſes.

The hare has various arts and inſtincts to eſcape its purſuers, by doubling, ſquatting, and winding; the rabbit has only one art of defence, but finds more ſecurity in that one, than the hare by all the arts it practices. It makes itſelf a hole in the earth, where it continues a great part of the day, and nurſes its young: there it remains ſecure from the fox, the hound, the kite, and almoſt every other enemy.

The female brings forth her young ſeparate from the male. On this occaſion ſhe digs herſelf an hole, different from the ordinary one, and more intricate, and makes a more ſpacious apartment at the bottom of it. She then plucks from her body a large quantity of hair, with which ſhe prepares a kind of bed for her young. She never leaves them the two firſt days, except to procure nouriſhment, and returns with the utmoſt diſpatch: ſhe continues to ſuckle her young almoſt ſix weeks, when they become ſtrong, and are able to go abroad. During all this time, their ſeparate

parate apartment is ſeldom viſited by the male, but as ſoon as the little family are able to come to the mouth of the hole, he ſeems to acknowledge them as his offſpring, takes them between his paws, ſmooths their ſkin, and licks their eyes; each, in its turn, having an equal ſhare of his careſſes.

Rabbits that are bred up tame, conſcious of being already protected, do not take the trouble of digging a hole: theſe, like all other animals under the protection of man, are of various colours; white, brown, black, and mouſe-colour. Moſt of the wild rabbits are of a brown. This animal, though leſs than the hare, generally lives longer. It is alſo fatter, in general, than the hare, but its fleſh is leſs delicate. Tame rabbits are larger than wild ones, from their taking more nouriſhment, and uſing leſs exerciſe, but their fleſh ſofter and more inſipid. The counties of England, which are reckoned moſt famous for theſe animals, are Lincolnſhire, Norfolk, and Cambridgeſhire. The ſkins of the rabbit, eſpecially thoſe which are white, are uſed for lining cloaths, and are conſidered as a cheap

cheap imitation of ermine; but the principal uſe made of rabbits fur, is in the manufacture of hats; ſome parts of it, however, which are unfit for that purpoſe, have been found as good as feathers for ſtuffing beds and bolſters.

The Angora rabbit has long hair, waved, and of a ſilky fineneſs, like that of the goat of Angora. The Ruſſian rabbit has a double ſkin over the back, into which it can withdraw its head; and another under the throat, in which it can place its fore-feet: in the looſe ſkin on the back, it has ſmall holes, to admit light to the eyes: the colour of the body is a paliſh yellow, and the head and ears are brown.

Rabbits are ſubject to two principal infirmities. Firſt, the rot, which is cauſed by the giving them too large a quantity of greens, or from the giving them freſh gathered, with the dew or rain hanging in drops upon them. It is over-moiſture which always cauſes this diſeaſe; the greens therefore are always to be given dry, and a ſufficient quantity of hay, or other dry food, intermixed with them, to take up the abundant

abundant moiſture of their juices. On this account the very beſt food that can be given them, is the ſhorteſt and ſweeteſt hay that can be got, of which one load will ſerve two hundred couple a year; and out of this ſtock of two hundred, two hundred more may be eat in the family, two hundred ſold to the markets, and a ſufficient number kept in caſe of accidents.

The other general diſeaſe of theſe creatures is a ſort of madneſs: this may be known by their wallowing and tumbling about with their heels upwards, and hopping in an odd manner into their boxes. This diſtemper is ſuppoſed to be owing to the rankneſs of their feeding; and the general cure is the keeping them low, and giving them the prickly herb, called tare thiſtle, to eat.

THE BRASILIAN RABBIT.

THIS animal has very long ears, black eyes, and a white ring round the neck: the face is of a reddiſh colour, the chin white, and the body ſomewhat darker than the common hare; it has a whitiſh belly, and is without a tail.

tail. Some of theſe animals have not the white ring round the neck. They inhabit Braſil, and Mexico, and live in woods, but do not burrow: they are very prolific, and their fleſh is very good meat.

THE BAIKAL RABBIT.

THE fur of this animal is of the colour of the common hare, but it is red about the neck and feet. It has a long tail, which is black above and white beneath. It is larger than a common rabbit; and inhabits the country beyond lake Baikal. It agrees with the common rabbit in nature, and the colour of the fleſh; but the fur is coarſe and of no value.

Linnæus mentions the Cape rabbit, which has red feet, and a tail about the length of the head: he ſays it inhabits the Cape of Good-Hope, and burrows: this, however, is the whole account which Linnæus has given of the ſpecies.

THE BEAVER.

THE beaver is the only animal, among quadrupeds that has a flat

broad tail, covered with ſcales, ſerving as a rudder to direct its motions in the water. It has membranes, or webs, between the toes on the hind-feet, but none on the fore-feet, which, as in the ſquirrel, ſupply the place of hands. In ſhort, this animal, in its fore-parts, entirely reſembles a quadruped, and in its hinder-parts approaches the nature of fiſhes, by having a ſcaly tail. It has ſtrong cutting-teeth, ſhort ears, almoſt hid in the fur, and a blunt noſe; the hair is of a deep cheſnut brown. Its lengh from noſe to tail is about three feet; and the tail is about eleven inches long, and three broad. It is ſingular in its conformation, as having, like birds, but one and the ſame vent for its natural diſcharges.

About the month of June and July, the beavers begin to aſſemble and form a ſociety, which is to continue for the greateſt part of the year. They gather together from all quarters, and uſually form a company of at leaſt two hundred. Where they meet they generally fix their abode, and this is always by the ſide of a lake or river. If it be a lake, and conſequently has no ſtream, they diſpenſe with building a dam;

dam; but if it be a river, which is ſubject to floods and falls, they build a dam or pier that croſſes the ſtream, ſo that it forms a dead water in that part which lies above and below. In order to form this pier, they drive ſtakes into the ground which are about five or ſix feet long, placed in rows, wattling each row with pliant twigs, and filling the interſtices with clay, which, they ram down very cloſe. The ſide next the water is ſloped, and the other perpendicular. The bottom is from ten to twelve feet thick; but the thickneſs gradually diminiſhes to the top, which is about two or three. This dam or pier is generally fourſcore or an hundred feet in length. If we compare the greatneſs of the work with the powers of the architect, it will appear enormous; but the ſolidity with which it is built is ſtill more aſtoniſhing than its ſize.

They erect their houſes near the ſhore, in the water collected by means of the dam. They are built on piles, and are either round or oval. The tops are vaulted, and conſequently their inſide reſembles an oven, and the outſide a dome. The walls, which are

two feet thick, are made of earth, ſtones, and ſticks, placed together with uncommon art; and the walls within are as neatly plaiſtered as if they were wrought by the trowel of an experienced maſon. There are two openings in each houſe; one into the water, and the other towards the land. The height of theſe houſes above the water is uſually about eight feet. For the convenience of change, in caſe of floods, they frequently make two or three ſtories in each dwelling: from two to thirty beavers inhabit each houſe; and, in each pond, there are from ten to twenty-five houſes. Each beaver prepares its bed of moſs, and every family collects a magazine of winter proviſions, conſiſting of bark and boughs of trees, which they depoſit under water, and bring into their appartments as occaſion may require. In winter they are fondeſt of the ſaſſafras, the aſh, the birch, the plane, and ſweet gum: but, during the ſummer, they are perfect epicures, and daily regale themſelves on the choiceſt plants and fruits which the country affords. Though they are not fond of fiſh in general, they ſometimes feed on crabs and crawfiſh.

In

In the conſtruction of their buildings, each performs his part. Some gnaw, with their teeth, large pieces of wood as thick as a man's arm, into beams or pillars; others roll the pieces along the water; ſome dive under water, and ſcrape holes in the earth with their feet to receive theſe pillars; while others are buſied in rearing them in their proper places: another party is engaged in collecting twigs to wattle the piles with. Some collect ſtones, earth, and clay; others temper the mortar; and others on their broad tails carry the materials to the proper places, and, with the ſame inſtrument, ram them between the piles, or plaiſter the inſide of their houſes. They appoint an overſeer in the ſociety; who gives a certain number of ſtrokes with his tail, as a ſignal for repairing to particular places; either for mending defects, or at the approach of an enemy; and the whole company attend to it with the utmoſt aſſiduity. They breed once a year, and bring forth at the latter end of the winter; they have two or three young at a birth.

From the reſult of the beaver's labours, we ſee how far inſtinct may be

aided by imitation; and to what degree animals, which have neither language nor reaſon, can concur for their mutual advantage. If we examine this creature merely as an individual, we ſhall find it inferior in cunning to many other quadrupeds, and to almoſt all in the powers of annoyance and defence. When taken from its fellows, and kept in ſolitude, or in a ſtate of domeſtic tameneſs, it is a mild, gentle, and familiar animal, but appears ſomewhat dull and melancholy. It has no violent paſſions nor vehement appetites, but is perfectly calm and indifferent, without attachments or antipathies, neither endeavouring to pleaſe, or deſiring to offend. It is equally unqualified to ſerve or to command, and is only adapted to live among its kind. Its talents are diſplayed only in ſociety; when alone, it has but little induſtry, and wants the ſagacity to guard againſt the moſt obvious ſnares laid for it by the hunter: it never attacks any other animal, and when it is attacked itſelf it prefers flight to the combat, and reſiſts only when driven to an extremity, fighting only when its ſpeed can no longer avail.

Beſide

Beſides theſe aſſociated beavers, there is another ſort, called terriers, which either have not the induſtry or ſagacity to erect houſes like the others: they burrow in the banks of rivers, and, like the others, treaſure up their winter ſtock of proviſion.

Beavers vary in their colour: the fineſt are black, but the general colour is a cheſnut brown, more or leſs dark; they have been ſeen white, but not often. Their ſkins are a conſiderable article in trade, being the foundation of the hat manufacture. In 1763, the Hudſon's-Bay company ſold fifty-four thouſand, ſix hundred and ſeventy beavers ſkins in one ſale.

Merchants diſtinguiſh three ſorts of beavers, though they are all the ſkins of the ſame animal; the new beaver, the dry beaver, and the coat beaver. The new beaver, which is alſo called the Muſcovy beaver, becauſe it is uſually kept to be ſent to Muſcovy, is that which the ſavages catch in their winter hunting. It is the beſt and the moſt proper for making fine furs, becauſe it has loſt none of its hair by ſhedding. The dry beaver, which is alſo called lean beaver, comes from the ſummer hunt-

hunting, which is the time that theſe animals loſe part of their hair. Though this ſort of beaver is much inferior to the other, it may alſo be employed in furs; but it is chiefly uſed in the manufacture of hats. The French call it ſummer caſter or beaver. The coat beaver is that which has contracted a certain groſs and oily humour, from the ſweat which exhales from the bodies of the ſavages, who wear it for ſome time: though this ſort is better than the dry beaver, it is uſed only in the making of hats.

The valuable drug caſtoreum is taken from the inguinal glands of theſe animals. The Ruſſian caſtor is ſo much better than the American, that the former ſells for two guineas a pound, and the latter about eight ſhillings and ſixpence; the Ruſſian caſtor being leſs waxy and more eaſily pulveriſed: but though we import this drug from Ruſſia, we export to that country vaſt quantities of beaver-ſkins. Caſtor is reckoned an excellent medicine in all nervous caſes, particularly for hyſteric fits, and many female diſorders.

Beavers inhabit Europe, from Lapland to Languedoc; they are found in great

great plenty in the North; and ſometimes they are met with in the Rhone, the Gardon, the Danube, the Rhine, and the Viſtula. They are in great plenty in the Ruſſian Aſiatic dominions; but no where in greater multitudes than in North-America. The fleſh of theſe animals is reckoned delicate food, being preſerved, after the bones are taken out, by drying in the ſmoke: the tail, however, is eſteemed as the choiceſt dainty.

THE MUSK BEAVER.

THIS animal has a thick blunt noſe, large eyes, and ſhort ears, which are almoſt hid in the fur. The toes on each foot are ſeparated; thoſe behind are fringed on each ſide with ſtrong hair, cloſely ſet together: the tail is compreſſed ſideways, is very thin at the edges, and covered with ſcales, intermixed with a few hairs. The head and body is of a reddiſh brown; and the breaſt and belly aſh-coloured, tinged with red. The fur is very fine; and the length of the body, from noſe to tail, is about twelve inches. The length

of

of the tail is about nine inches, and the form of its body exactly reſembles that of a beaver. Charlevoix calls this animal the muſk rat. It is a native of North-America, and breeds three or four times in a year, bringing forth from three to ſix each time: the male and female conſort together during ſummer; and, when winter approaches, they unite in families, and retire into ſmall round edifices, covered with a dome, compoſed of herbs and reads cemented with clay. They have ſeveral pipes at the bottom of theſe edifices, through which they paſs in ſearch of food, as they are not ſo provident as the beavers, in forming magazines. Their habitations, in winter, are covered many feet deep with ſnow and ice; but they creep out and feed on the roots that lie beneath. They erect a new habitation every year, and deſert their old one. The fur of this animal is very ſoft, and much eſteemed. The whole body of this creature has an exquiſite muſky ſmell during ſummer, which it loſes in the winter.

THE

THE LONG-NOSED BEAVER.

IT has a long ſlender noſe, and very ſmall eyes, but no external ears: its tail is compreſſed ſideways, and about eight inches long: the colour of the head and back is duſky, and the belly a whitiſh aſh-colour. The length of this animal, from noſe to tail, is about ſeven inches. It inhabits Lapland, Ruſſia, and the banks of the Volga and the Yaick. It never wanders far from rivers, and makes holes in the cliffs, with the entrance beneath the loweſt fall of the water. It works upwards, but never ſo high as the ſurface, but ſo as to lie beyond the higheſt flow of the river. It feeds on fiſh, and is the prey of the pikes and ſiluri, but communicates to them ſo ſtrong a flavour of muſk as to make them unfit for food. The ſcent of this is like the former, eſpecially about the tail. The ſkin of this animal is put into cheſts to keep the moths away.

THE

THE PORCUPINE.

THE porcupine is about two feet long, and fifteen inches high. It has a long creſt on the top of the head, reclining backwards, formed of ſtiff briſtles: the body is covered with quills from ten to fourteen inches long, and very ſharp at the points. Each quill is thickeſt in the middle, and inſerted into the animals ſkin, in the ſame manner as feathers grow upon birds: theſe quills are varied with black and white, and between them are a few hairs. The head, belly, and legs, are covered with ſtrong briſtles, terminated with ſoft hair of a duſky colour. Its whiſkers are long, and its ears like human ears. It has four toes before, and five behind: its tail is ſhort and covered with quills. All the quills of this animal naturally incline backwards like the briſtles of an hog; but when the animal is irritated, they riſe and ſtand erect, like briſtles. The muzzle of this animal bears ſome reſemblance to that of an hare, but it is black; the legs are very ſhort, and the eyes ſmall, like thoſe of an hog, and

Porcupine
Brasilian Porcupine
Quebec Marmot

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and meaſure only one third of an inch from one corner to the other.

The porcupine partakes much of the nature of the hedge-hog, and, like that animal, has this formidable apparatus of arms rather to defend himſelf, than to annoy the enemy; for the opinion of its being able to dart its quills at its enemies, is now univerſally allowed to be fabulous: they are firmly fixed in the ſkin, and are only ſhed when the animal moults them, as birds do their feathers. Ellis, it is true, informs us, that a wolf was found dead at Hudſon's Bay, with the quills of a porcupine fixed within its mouth, but that might very naturally happen; for the wolf, in the rage of appetite, probably attempted to devour the porcupine, quills and all, and paid for its temerity with its life. It is, however, certain that thoſe porcupines which have been brought into Europe, have never been known to launch their quills, though irritated to the higheſt degree. Dr. Shaw, who ſaw numbers of porcupines in Africa, ſays none of them ever attempted to dart their quills; their uſual method of defence being to lie down on one ſide, and at the approach of an enemy, to

riſe up ſuddenly and wound him with the points on the other. This animal, it is imagined, is ſeldom the aggreſſor, and when attacked by other animals, only directs its quills ſo as to keep always pointing towards the foe. In general he is then ſecure, and Kolben aſſerts that even the lion will not venture to attack him when he is thus on his guard.

Mr. Pennant ſays the porcupine is an harmleſs animal, and lives on fruits, roots, and vegetables. Many other naturaliſts, particularly Dr. Goldſmith, ſay it chiefly hunts for ſerpents, and all other reptiles for ſubſiſtence: that between the ſerpent and the porcupine there exiſts an irreconcilable enmity, and that they never meet without a mortal engagement: that, upon theſe occaſions, the porcupine rolls itſelf upon the ſerpent, by which means it deſtroys it, and afterwards devours it. Thoſe, however, which are brought to this country to be ſhewn, are uſually fed on bread, milk, and fruits; but they have no objection to meat when it is offered them.

The Americans aſſure us that theſe animals live from twelve to fifteen years.

years. The female goes with young ſeven months, and produces but one at a time, which ſhe ſuckles about a month. In its defence ſhe is intrepid, but, at other ſeaſons, ſhe is timid, fearful, and harmleſs

The porcupine is eagerly purſued by the Indian hunters, in order to make embroidery of its quills, and to feed on its fleſh. With regard to their embroidery, they are very ingenious; they dye the quills of various colours, and ſplit them into ſlips, with which they decorate their baſkets, belts, and many other articles of furniture and ornament. The porcupine is a dull and torpid animal; extremely voracious, though capable of enduring hunger. It is hardly poſſible to tame it, and the poet very properly gave it the epithet of fretful; for, when one of theſe animals was ſhewn in London, if any perſon did but touch the bars of the iron cage in which it was confined, it excited its reſentment, and its quills were inſtantly erected.

The porcupine inhabits India, Perſia, Paleſtine, and every part of Africa: it is found wild in Italy, tho' not originally a native of Europe. It

is brought into the markets of Rome, where it is ſold for food *. The Italian porcupines have a ſmaller creſt and ſhorter quills than thoſe of Aſia and Africa.

THE LONG-TAILED PORCUPINE.

THIS animal has large bright eyes, ſhort naked ears, and long whiſkers. Its body, which is ſhort and thick, is covered with long ſtiff hairs as ſharp as needles, of different colours as the rays of light fall on them. Its feet are divided into five toes, one of which turns backwards and ſerves as a thumb: the tail is about the length of the body, and very ſlender towards the end, which conſiſts of a thick tuft; the briſtles are thick in the middle, appear as if they were jointed, and are tranſparent and ſhining. This animal inhabits the iſlands of the Indian Archipelago, and lives chiefly in foreſts.

* Phil. Tr. Abr. v. 163.

THE

THE BRASILIAN PORCUPINE.

THIS creature, which is alſo called the couando, is much ſmaller than the creſted porcupine, and its quills are not above a fourth part of the length of thoſe of that animal. It has a ſhort blunt noſe, and long white whiſkers. It inhabits Mexico and Braſil, lives chiefly in the woods, and feeds on fruits and poultry. It ſleeps in the day and ſearches for food in the night. It makes a noiſe with its noſtrils, as if out of breath, and grunts like a hog. It climbs trees, but with no great expedition, and, in deſcending, twiſts its tail (which is pretty long) round the branches to prevent its falling. Like the firſt, it is incapable of ſhooting its quills. This animal grows very fat, and its fleſh is white and good. It is very eaſily tamed, and is a ſpecies very rarely brought into Europe.

THE CANADA PORCUPINE.

THIS animal, which Mr. Buffon calls the urſon, has not ſo round a body as thoſe already mentioned, but has

more the reſemblance of a pig in ſhape. It is covered with long briſtly hair, with ſhorter hair underneath, under which great quantities of quills lie concealed. Theſe quills are white, with a brown point, and bearded, and do not exceed four inches in length. Theſe animals make their neſts under the roots of large trees, ſleep very much, and feed on wild fruits and bark of trees, eſpecially upon the bark of the junpier. In winter the ſnow ſerves them for drink; and in ſummer they lap water like a dog. When they cannot eſcape their purſuer, they make towards him ſideways, in order to wound him with the quills: but they are no very extraordinary weapon of defence; for, on ſtroking the hair, they will ſtick to the hand and come out of the ſkin. The Indians ſtick theſe quills in their noſes and ears, to make holes for their ear-rings and other ornaments. The edges of their deer-ſkin habits are alſo trimmed with fringes made of theſe quills, and with them they decorate their bark boxes. Theſe animals are very plentiful near Hudſon's Bay, and many of the trading Indians make them their principal food, eſteeming them both wholeſome

and

and delicate. Mr. Banks brought one of theſe animals from Newfoundland, which was about the ſize of a hare, but ſhorter and more compact; and the length of its tail was about ſix inches.

THE MARMOT.

THE marmot is almoſt as large as a hare, but it is as corpulent as a cat, and has ſhorter legs. Its head ſomewhat reſembles that of an hare, except that its ears are much ſhorter, and almoſt hid in the fur. The body is cloathed with very long hair, and a ſhorter fur below. Theſe are of different colours, browniſh aſh, mixed with tawny; and the legs and lower-part of the body are reddiſh. This animal has four toes before, and five behind: the length of its body from noſe to tail is about ſixteen inches; and its tail, which is tufted and well furniſhed with hair, is about ſix inches.

The marmot is chiefly a native of the Alps, though it inhabits Poland, Ukraine, and Chineſe Tartary. It feeds indiſcriminately on inſects, roots, and vegetables, but is remarkably fond of milk, and when lapping it, makes

makes a murmuring noiſe, expreſſive of its ſatisfaction. When pleaſed or careſſed, it yelps like a puppy; but, when it is enraged, and before a ſtorm, it has a piercing whiſtle which offends the ear. This is a very cleanly animal, but their bodies have a diſagreeable ſcent, eſpecially in ſummer. Its fleſh is fat and firm, and ſometimes eaten, but the ſcent which is offenſive in the living animal predominates after it is dead.

This creature is tamed without any difficulty, and is readily taught to dance, to wield a cudgel, and to obey the voice of its maſter. Like the cat, it has an antipathy to the dog; and, when it becomes familiar to the family, and is ſure of being countenanced by its maſter, it will even attack a maſtiff; but, except in this particular, it is a very inoffenſive animal; and, unleſs it is provoked, ſeems to live in friendſhip with every creature. It is, however, very apt to gnaw furniture or linen, and even to make holes through wooden partitions. As its legs are very ſhort, and have ſome ſimilitude to thoſe of the bear, it will, like that animal, frequently ſit up and walk upon its hind-

legs. Like the ſquirrel, it carries the food to its mouth with the fore-paws, and ſits upon its hinder-parts to feed. The marmot is uſually taken to be ſhewn, eſpecially by the Savoyards, who inſtruct them to perform a great variety of tricks to entertain the ſpectators.

But, what particularly diſtinguiſhes the marmot from every other quadruped, except the bat, and the dormouſe, is its ſleeping during the winter. Though a native of the higheſt mountains, and where the ſnow is never wholly melted, it ſeems to feel the influence of the cold more than any other animal; and in winter, its faculties are abſolutely chilled up. About the end of September, or the beginning of October, the marmot prepares its habitation for the winter, from which it never departs till April. This retreat is an hole on the ſide of a mountain, extremely deep, with a ſpacious apartment at the bottom, which is ſomewhat longer than it is broad. Several marmots reſide in this habitation at the ſame time, without incommoding each other, or injuring the air they breathe. The form of the hole reſembles a Y; the two branches being two openings, which

which lead into one channel that terminates in their general apartment at the bottom. The whole being made on the declivity of a mountain, one of the openings iſſues out ſloping downwards, ſerving as a kind of drain or ſink to the whole family: the other opening, on the contrary, ſlopes upwards, and anſwers the purpoſe of a door. The apartment at the end is lined with moſs and hay, of which they take care to make an ample proviſion during ſummer. This being a work of great labour, it is undertaken in common; ſome gather the graſs, and others, in their turn, drag it into their hole.

In this retreat they all live together, after they have, with their united labours, made it as convenient as they can: there they remain when the ſtorm is high, when it rains, or when they are apprehenſive of danger. They never ſtir from their chamber but in fine weather, and then they never wander far from their habitation. When they venture from home, one of them is placed upon a lofty rock as a centinel, while the reſt are diverting themſelves, or are employed in providing for their winter's convenience. When an enemy ap-

approaches, this truſty centinel acquaints his companions with a whiſtle, when they all run immediately home, the centinel bringing up the rear.

It muſt not be imagined that the hay is intended for proviſion; nature has kindly apprized them that during the winter they ſhall not want any. Therefore they make no preparations for food, but employ themſelves diligently to render their apartment commodious. When they perceive the firſt approaches of winter, they cloſe up the two entrances of their habitation, which they perform with ſuch ſolidity, that it is eaſier to dig up the earth in any other part, than where they have cloſed it. At this time they are very fat, and continue ſo for two or three months; after which their fleſh gradually diminiſhes, and by the end of the winter they are uſually very lean. When their retreat is opened the whole family is ſeen, each rolled into a ball, and covered with the hay. In this torpid ſtate they appear entirely lifeleſs, and when they are taken from their habitation, they appear inſenſible, except they are brought before a fire, which ſoon revives them; but they would die

if

if they were too ſuddenly brought before a large fire.

From what has been ſaid, we may form ſome conception of the ſtate of theſe animals which exiſt half the year without food. It is well known that in thoſe diſorders where the circulation is extremely languid, the appetite is proportionably diminiſhed, ſo, in theſe animals, as the blood ſcarce moves, or only moves in the larger veſſels, they require no nouriſhment to ſupply what is worn away by its motions. Indeed they gradually become ſomewhat leaner, but even that is not perceptible for ſome months. With motion enough in their fluids to keep them from putrefaction, and nouriſhment enough to ſupply the waſte of their languid circulation, they continue rather feebly alive than ſleeping.

Theſe animals produce but once a year, and bring forth two or three at a time: the extent of their lives is about nine or ten years.

THE MARYLAND MARMOT.

THIS animal is about the ſize of a rabbit, and, in other reſpects, greatly reſem-

reſembles the former, except in having a blueiſh ſnout, and a longer tail. It is found in Virginia, Penſilvania, and the Bahama iſlands. It lives on wild fruits and other vegetables; and, during winter, it ſleeps under the hollow roots of trees. Its fleſh is excellent, and ſomewhat reſembling that of a pig. When ſurprized it retreats to holes in the rocks. We have no certain information, whether this animal ſleeps, during winter, in the climate of theſe iſlands.

THE QUEBEC MARMOT.

THIS has ſhort round ears, a blunt noſe, puffed cheeks, and a duſky face. The hair on the back is grey at bottom, black in the middle, and whitiſh at the tips. The belly and the legs are of an orange colour: the toes are black, naked, and quite divided. It has four toes and the rudiments of another on the fore-feet, and five on thoſe behind. Its tail is ſhort, and of a duſky colour, and the body is ſomewhat larger than that of a rabbit. It inhabits Hudſon's-Bay and Canada.

THE GERMAN MARMOT.

THIS animal has full black eyes, and large rounded ears; the colour of the head and face is of a reddiſh brown, and the cheeks white. It has a white ſpot on each ear, another on each ſhoulder, and another on each ſide near the hind legs. The tail is ſhort, and almoſt naked. It has four toes and a fifth claw on the fore-feet, and five toes behind. The length of the body is about nine inches, and the tail three inches. It is found in Auſtria, Sileſia, and many parts of Germany and Poland. It devours great quantities of corn, and carries ſtill more to its winter's hoard. It has two pouches within its cheeks, which are receptacles for its booty, and are ſo capacious as to hold a quarter of pint; theſe it crams ſo full that the cheeks ſeem as if they were ready to burſt.

They live under ground; at firſt they burrow down obliquely, and form an entrance; and, at the end of that paſſage, the male makes one perpendicular hole, and the female ſeveral various vaults are formed at the end of

theſe

theſe, ſerving as lodgings for themſelves, and their young, and as ſtore-houſes for their winter food; each animal has its different apartment, and every ſort of grain its different vaults. The lodging apartments are lined with ſtraw or graſs, and theſe apartments are of different depths, according to the age of the animal; ſome not exceeding a foot deep, and others four or five.

In Auguſt they begin to lay in their proviſions, conſiſting principally of corn, peas, and beans; and when they have finiſhed their work, they carefully ſtop up the mouth of their paſſage. In winter the peaſants go to what they call hamſter-neſting *; and, having found the retreat, they dig till they have diſcovered the hoard, and are amply rewarded for their trouble; for, excluſive of the ſkins of the animals, which are valuable furs, they uſually find two or three buſhels of good grain in the magazine.

Theſe animals are extremely fierce, and make a noiſe like the barking of a dog: they breed twice or three times a year, and uſually bring five or ſix at a

* Mr. Buffon alſo calls this animal the hamſter.

time: they are ſo very numerous in ſome ſeaſons, as to occaſion a dearth of corn: they would indeed be more numerous than they are, but vaſt numbers of them are deſtroyed by polecats, which purſue them into their holes. It is remarkable that the hair of theſe animals ſticks ſo cloſe to the ſkin, that it is extremely difficult to pluck it off.

THE CASAN MARMOT.

IT is about the ſize of a rat, and has ſhort round ears. The hair is ſmooth, and of a yellowiſh brown, with faintiſh round ſpots of white. It has four toes before, and five behind; and the tail is about half the length of the body. It inhabits the banks of the Volga. Theſe animals burrow, and ſit in multitudes near their holes like rabbits; and when they are alarmed, they whiſtle with a low note. They are exceſſive fond of ſalt, and vaſt quantities of them are taken on board the barges that load with that commodity at Solikamſky, and fall down into the Volga, below Caſan.

THE

THE LAPLAND MARMOT.

THIS animal has a pointed head, with two very long cutting-teeth in each jaw. Its upper-lip is divided; it has ſmall black eyes, a little mouth, long whiſkers, and ſmall blunt ears, reclining backwards. Its legs are very ſhort, and it has four ſlender toes, covered with hair on the fore-feet, and five toes on thoſe behind: the body and head are about five inches long, and the tail half an inch. The body and head are black and tawny, diſpoſed in irregular blotches, and the belly is of a yellowiſh white.

Theſe animals appear in immenſe quantities at uncertain periods in Norway and Lapland. They are indeed the peſt and the aſtoniſhment of the country: they march in troops like the army of locuſts, ſo emphatically deſcribed by the prophet Joel. They deſtroy almoſt every blade and root of graſs, and ſpread univerſal deſolation: they even infect the ground, and cattle are ſaid to periſh which taſte the graſs that they have touched. They march in legions, and neither fire, lakes, nor

torrents, can ſtop their progreſs. They bend their courſe ſtraight forward, and ſwim over the lakes and rivers. They are ſo fierce as not to be intimidated in their career, and if a ſtick is preſented to them, they will take hold of it, and ſuffer themſelves to be ſwung about before they will quit their hold. If they are ſtruck, they bark like a dog, and turn about and bite. They are the prey of foxes, lynxes, and ermines, who follow them in troops. At length they periſh through want of food, or deſtroy each other; or they are loſt in the ſea, or ſome great water.

Fortunately for the country, this phænomenon does not frequently occur, and is not ſeen above once or twice in twenty years. It ſeems like a vaſt colony of emigrants from a nation overſtocked. From what country theſe animals have travelled, is not certainly known. We are told by Linnæus that they come from the Norwegian and Lapland Alps. Pontoppidan is of opinion that Kolen's rock, which divides Nordland from Sweden, is their native place: but, wherever they come from, it is certain that they never return. Their courſe ſeems to be prædeſtinated,

and

and they purſue their fate. It was once ſeriouſly believed, that theſe animals were generated in the clouds, and fell in ſhowers upon the earth.

THE EARLESS MARMOT.

THIS animal has no external ears, having only a ſmall orifice on each ſide of the head, for the admittance of ſounds. It has a blunt noſe, a long ſlender body, and a very ſhort tail. Its colour is a dark grey, or a yellowiſh brown.

The marmotta minor is the ſame animal with this, but differs a little in colour: the upper-part of the body of the marmotta minor is grey, with ſome red ſpots, ſpeckled with yellow. It inhabits Bohemia, Auſtria, Hungary, and Siberia. It burrows, and forms a magazine of corn, nuts, &c. for its winter proviſion. The ladies of Bohemia formerly made cloaks with the fur of this animal.

THE PODOLIAN MARMOT.

THE cutting-teeth of the lower-jaw of this animal are half as long again as thoſe of the upper: the eyes are

are extremely ſmall, and almoſt hid in the fur, like thoſe of a mole. It has four toes and a claw on the fore-feet, and five on the hind, and is of an aſh-colour. It is about the ſize of a ſquirrel, and has a ſhort tail. It inhabits Podolia, Ukraine, Volhinia, and Perſia. This animal alſo burrows, and forms magazines for winter food. It feeds on corn, fruits, and herbs, and lives under ground during the winter, in which ſeaſon the peaſants frequently turn them up with their ploughs.

THE CIRCASSIAN MARMOT.

THIS animal has red ſparkling eyes, ſharp teeth, and ears reſembling thoſe of mice. Its body is long, and of an equal thickneſs. Its hair is long, and of a cheſnut colour: it has ſharp claws, a long buſhy tail, and its fore-feet are ſhorter than thoſe behind. It is about the ſize of the German marmot. This animal is found in the neighbourhood of the river Terek, which flows out of Circaſſia and falls into the Caſpian Sea: it runs up hill very faſt, but very ſlowly down. This creature alſo burrows, and lives under ground.

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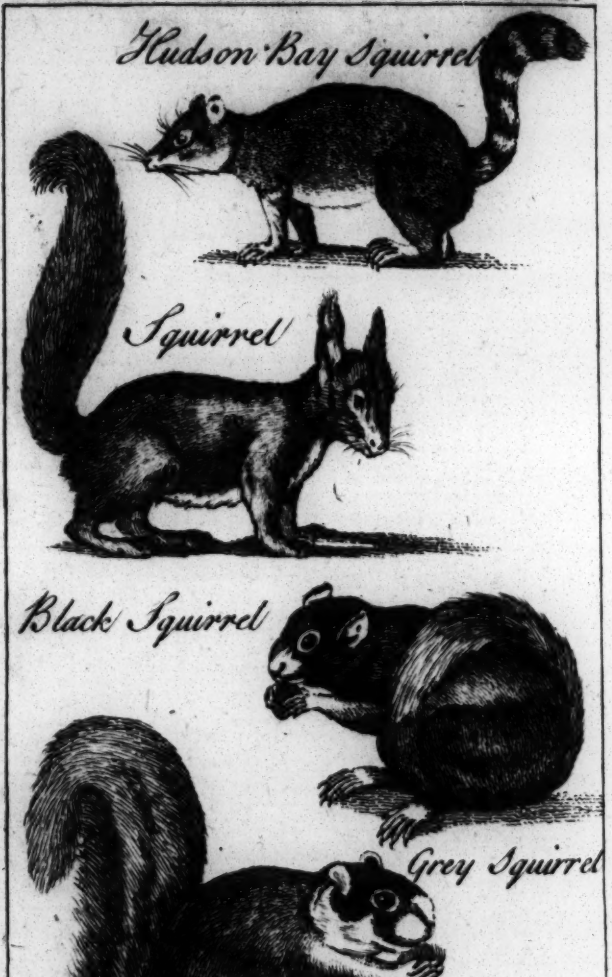
Hudson Bay Squirrel
Squirrel
Black Squirrel
Grey Squirrel

THE SQUIRREL.

THIS animal is ſo well known as hardly to require any deſcription; but ſuppoſing it unknown to any, we might convey ſome idea of its form by comparing it to a rabbit, obſerving that it has ſhorter ears and a longer tail. Its ears are alſo terminated with long tufts of hair. The colour of the head, body, tail, and legs, of this animal, is a bright reddiſh brown; the belly and breaſt white: the eyes are large, black, and lively: the fore-teeth ſtrong, ſharp, and well adapted to its food: the legs are ſhort and muſcular; the toes long, and divided to their origin; the nails are ſharp and ſtrong. In ſhort, the animal, in all reſpects, is fitted for climbing or clinging to the ſmalleſt boughs. It has but four toes on the fore-feet, and a claw in the place of a thumb or interior toe: there are five toes on the hind-feet. The tail of the ſquirrel is alone ſufficient to diſtinguiſh it from any other animal, as it is extremely long, beautiful, and buſhy, ſpreading like a fan, and, when thrown up behind, ſerves to cover the whole body,

body. When erected, it alſo ſerves the little animal as an umbrella, to defend it from the injuries of heat and cold; and, when extended, it is extremely ſerviceable in taking thoſe vaſt leaps that the ſquirrel takes from tree to tree. It indeed anſwers another purpoſe: we are aſſured by Kleim, Scheffar, and Linnæus, that when the ſquirrel is diſpoſed to croſs a river, a piece of bark is its boat, and its tail anſwers the purpoſe of a ſail.

The ſquirrel is a beautiful little animal, which may be ſaid to be but about half ſavage; and which, from its docility and innocence, is deſerving of our protection. It is neither carnivorous nor deſtructive; and its common food is nuts, fruits, buds, and acorns. It is cleanly, nimble, active, and induſtrious. Like the hare and rabbit, it ſits upon its hinder legs, uſing the fore paws as hands. The ſquirrel ſeldom deſcends to the ground, except during a ſtorm, but jumps from one branch of a tree to another. This provident little animal never leaves its food to chance, but in ſummer, which is the ſeaſon of plenty, it ſecures in ſome hollow tree a vaſt magazine of nuts for winter proviſion; cautiouſly

cautiouſly foreſeeing the dreary ſeaſon, when the foreſt ſhall be ſtripped of fruits and foliage. In the ſpring it is diverting to obſerve the female feigning an eſcape from the purſuit of two or three lovers, and to obſerve the various proofs they give of their agility, which is then exerted in its full force.

The ſquirrel never appears in the open fields, nor in the coppices or underwoods. It always keeps among the talleſt trees, and avoids as much as poſſible the habitations of men. It makes its neſt of moſs and dried leaves, between the fork of two branches, and brings three or four young at a time. It has two holes to its neſt, and, as Pliny juſtly remarks, always ſtops up that on the ſide the wind blows. It is extremely vigilant, and if any perſon ſhould touch the bottom of the tree in which it reſides, the ſquirrel immediately takes the alarm, flies away to another tree, and travels with great eaſe along the tops of the foreſt, till it is perfectly out of danger. When the alarm is over, the animal returns to its neſt, by paths that are utterly impaſſable to any other quadruped. It uſually moves

moves by bounds or leaps, and with great facility paſſes from one tree to another, at the diſtance of forty feet; and when it is compelled to deſcend, it runs up the ſide of another tree with amazing agility. It uſually expreſſes pain by a ſharp piercing note, and has another note, expreſſive of its pleaſure or ſatisfaction, not much unlike the purring of a cat.

The little manſion of the ſquirrel is ſometimes attacked by a moſt formidable enemy: the martin is incapable of making a neſt for itſelf, and therefore frequently goes in queſt of a retreat for its young; for this purpoſe it generally fixes upon the neſt of a ſquirrel, and deſtroys the tenant to take poſſeſſion of the manſion. But this calamity does not often happen, and ſquirrels may be ſaid to lead the moſt playful frolicſome life of almoſt any other animal. The time of their geſtation is ſix weeks, and they bring forth about the middle of May.

Having already juſt mentioned the ſquirrel's mode of ſailing, it may not be thought impertinent to give a particular deſcription of it. When theſe animals, in their progreſs, meet with broad

broad rivers or extenſive lakes, which are very numerous in Lapland, they return into the neighbouring foreſt, as if by common conſent, each in queſt of a piece of bark, ſerving as ſo many boats to waft them over. When they are all equipped, they boldly commit their little fleet to the mercy of the waves, every ſquirrel being ſeated on its own piece of bark, and fanning the air with its tail, to conduct the veſſel to its deſired haven. In this manner they frequently croſs lakes which are ſeveral miles over: but the poor little mariners are not always aware of the dangers of their navigation; for though the water may be calm towards the edges, it is generally more turbulent towards the middle. An additional guſt of wind ſometimes overſets the whole navy, and a ſhipwreck of three or four thouſand ſail enſues. This dreadful cataſtrophe is generally a lucky accident for the Laplander on the ſhore, who collects the dead bodies which are thrown up by the waves, feeds upon the fleſh, and gets a good price for the ſkins.

The ſquirrel is eaſily tamed, and becomes a very familiar animal. It

delights in warmth, and frequently creeps into a man's pocket or his boſom. It is uſually kept in a box, and fed with hazle-nuts, &c. and is a pleaſing little domeſtic. This animal inhabits Europe, North America, and the northern and the temperate parts of Aſia. A variety of them is found as far ſouth as the iſle of Ceylon. In Sweden and Lapland the colour changes into grey in winter. In Ruſſia and Lapland black ſquirrels are ſometimes found; and in many parts of England there is a beautiful variety with milk-white tails.

THE CEYLON SQUIRREL.

THIS animal is about three times the ſize of the European ſquirrel; its ears are tufted with black, its noſe is fleſh-coloured, its cheeks, legs, and belly are of a pale yellow, and its forehead, back, ſides, and haunches are black. The tail is of a light grey, buſhy, and twice the length of the body. It is an inhabitant of Ceylon.

THE

THE BOMBAY SQUIRREL.

THIS is an inhabitant of Bombay. The ears are tufted; the head, back, and ſides are of a dull purple; the belly, and the lower part of the legs and thighs are yellow, and the tip of the tail is orange-colour: the length of the body, from noſe to tail, is about ſixteen inches, and the tail ſeventeen. Dr. Hunter has a ſtuff'd ſkin of this animal in his cabinet.

THE GREY SQUIRREL.

THE hair of this animal is of a dull grey colour, mixed with black, and ſometimes tinged with yellow: the belly and the inſides of the legs are white; the ears are plain, the tail is long, buſhy, and grey, with black ſtripes. This animal is about the ſize of an half-grown rabbit. It inhabits the woods of Northern Aſia, North America, Peru, and Chili. Theſe animals abound in North America, where they do incredible damage to the plantations of maiz, by running up the ſtalks, and eating the young ears. A

reward of three pence per head is allowed by the provinces for every one that is killed; and Penſylvania alone paid in rewards eight thouſand pounds of its currency for what was deſtroyed in one year. Theſe animals make their neſts in hollow trees, with moſs, ſtraw, wool, &c. They feed on maiz, pine-cones, acorns, and maſt of all kinds. They make holes in the ground, where they depoſit a large ſtock of proviſion for the winter. When they are in want of meat, they deſcend from the trees, and viſit their magazines; and, during the cold ſeaſon, they confine themſelves to their neſts for ſeveral days together. They run up and down the trunks of trees, but ſeldom leap from branch to branch. In many particulars they have the actions of the common ſquirrel, and are very eaſily tamed. This animal is called *le petit gris* by Mr. Buffon, and the furs of this animal, which are imported under the name of petit gris, are very valuable. The fleſh of this ſquirrel is reckoned very delicate.

THE

THE BLACK SQUIRREL.

THIS animal is ſometimes entirely black, but is generally marked with white on the noſe, the neck, or the tip of the tail. It has plain ears, and its tail is ſhorter than that of the grey ſquirrel, though its body is about an equal length. It is found in Aſia, North America, and Mexico. Like the former, it makes great havock among the maiz, and, like that animal, makes its neſt in an hollow tree, and provides a ſtore for the winter.

THE VARIED SQUIRREL.

IT is about twice the ſize of the common ſquirrel, and has plain ears. The upper part of the body is varied with black, white, and brown, and the belly is tawny. It is a native of Mexico, and lives under ground, where it brings forth its young, and depoſits a ſtock of food for the winter. It lives principally on maiz, and is ſo fierce, that it cannot poſſibly be tamed.

THE BRASILIAN SQUIRREL.

THE Braſilian ſquirrel, which Mr. Buffon calls the coquallin, is a very beautiful animal, and remarkable for the variety of its colours. The head and body are variegated with white, black, brown, and orange colour; the inſide of the legs and the belly are of a bright yellow. The tail, which is annulated with black and yellow, is about ten inches long, and the body from noſe to tail about eight inches. It has no tuft at the extremity of the ears, nor does it climb the trees like moſt of the kind. It inhabits Braſil and Guiana.

THE GROUND SQUIRREL.

THE noſe and feet of this animal are of a pale red; the eyes are full, and the ears plain. The ridge of the back is marked with a black ſtreak, and each ſide with a pale yellow ſtripe, bounded above and below with a line of black. The head, body, and tail, are of a reddiſh brown, and the breaſt and belly white. It inhabits the North

of

of Aſia, and is found in great abundance in the foreſts of North America. Theſe animals never run up trees, except they are purſued, and cannot eſcape by any other means. They burrow, and form their habitations under ground, with two avenues, that they may get acceſs to one, if the other is ſtopped up. Their retreats are ingeniouſly contrived, in the form of a large gallery, with branches on each ſide, and at the end of each branch a large chamber, ſerving as a magazine to ſtore their winter proviſion in. They depoſit the acorns in one, the maiz in another, the hickery nuts in a third, and their favourite food, the chinquapin cheſnut, in the fourth. If their proviſions hold out, they ſeldom ſtir from their apartment during winter; but when that is exhauſted, they dig into cellars where apples are kept, or barns where maiz is ſtored, and do incredible miſchief; however, vaſt numbers of them are then deſtroyed by cats, which are inveterate enemies to them as well as to mice. Theſe animals bite ſeverely, and are ſo extremely wild, that it is hardly poſſible to tame them. Their ſkins are of very little

little value, but they are ſometimes uſed for the lining of cloaks.

THE FAT SQUIRREL.

THIS animal, which is called *Le loir* by Mr. Buffon, is cloathed with ſoft aſh-coloured hair; the belly being a little whitiſh. Its length from noſe to tail is about ſix inches, and its tail four and an half. It inhabits France, and the South of Europe: it lives in trees, leaps from bough to bough, and feeds on fruits and acorns. It grows very fat, lodges in the hollow of trees, and continues in a torpid ſtate during winter.

THE GARDEN SQUIRREL.

THE head and body of this animal is of a tawny colour; the throat, and all the under ſide of the body, white tinged with yellow. The eyes are ſurrounded with a large ſpot of black, reaching to the baſe of the ears, and another appears behind the ears: the length, from noſe to tail, is about five inches, and the tail four. It inhabits France, and the South of Europe; infeſts gardens,

dens, and is very deſtructive to fruits of all kinds, particularly peaches. It lodges in holes in the water, and brings forth five or ſix young at a time. It remains torpid during the winter, and has a ſtrong ſmell like a rat.

THE DORMOUSE.

THIS animal agrees with the ſquirrel in its food, reſidence, and ſome of its actions. It has round naked ears, full black eyes, and a white throat. It is about the ſize of a mouſe, but plumper, and its body is of a tawny red. Its tail is two inches and an half long, and pretty hairy, eſpecially towards the end. It inhabits woods or thick hedges, forming its neſt in the hollow of ſome low tree, or near the bottom of a cloſe ſhrub. As it wants much of the ſprightlineſs of the ſquirrel, it never aſpires to the tops of trees, or to ſport among the branches.

Like the ſquirrel, towards the approach of the cold ſeaſon they form a little magazine of nuts, beans, or acorns, for winter proviſion; and they take their food in the ſame manner, and in the ſame upright poſture as that animal.

animal. The conſumption of their hoard, during the rigour of the winter, is but ſmall, for they ſleep the greateſt part of the time: they retire into their holes, roll themſelves up in a ball, and lie almoſt torpid the greateſt part of that gloomy ſeaſon. In that ſpace they ſometimes experience a ſhort revival, by the warmth of a ſunny day, or an accidental change from cold to heat, which in ſome degree thaws their ſtagnant fluids, when they take a little of their proviſion, and then relapſe into their former ſtate.

In this manner they continue uſually aſleep, and only wake occaſionally, for above five months in the year, ſeldom venturing from their retreats, or in any open place, and conſequently are but ſeldom ſeen; for which reaſon they ſeem leſs common in England than they really are. Their neſts are made of moſs, graſs, and dead leaves; they uſually bring forth three or four young at a time, and that but once a year, which is in the ſpring.

THE SAILING SQUIRREL.

THIS animal has a ſmall rounded head, ſmall blunt ears, a ſhort neck, a clo-

a cloven upper lip, and two ſmall warts at the outer corner of each eye, with hairs growing on them. It has four toes on the fore feet, and, inſtead of a thumb, a ſlender bone, two inches and a half long, lodged under the lateral membrane, ſerving to ſtretch it out. From thence to the hind legs extends the membrane, which is broad, and a continuation of the ſkin of the ſides and belly. On the hind feet it has five toes, with a ſharp bending claw on each. The tail is covered with long hair, diſpoſed horizontally. The colour of the head, body, and tail, is a bright bay, inclining to orange in ſome parts. The breaſt and belly are of a yellowiſh white The length of this animal, from the noſe to the tail, is about eighteen inches, and the tail fifteen. It inhabits Java, and ſome other Indian iſlands; leaps from tree to tree as if it flew, and catches hold of the boughs with its tail. Theſe animals are different in ſize; Linnæus deſcribes one about the ſize of our ſquirrel, and Sir Edward Michelbourne killed one in one of the Indian iſles that was larger than a hare*. Nieuhoff

* Purchas's Pilgrim, I. 134.

deſcribes

deſcribes this ſpecies under the name of the flying cat.

THE FLYING-SQUIRREL.

THIS little animal, which is frequently brought over to England, is leſs than a common ſquirrel, and larger than a field mouſe. Its ſkin is very ſoft, and elegantly adorned with a dark fur in ſome parts of the body, and a light grey in others. It has round naked ears, large prominent ſparkling eyes, and very ſharp teeth, with which it gnaws any thing very expediouſly. It has a lateral membrane extending from the fore to the hind legs, and its tail is covered with long hair diſpoſed horizontally. When it does not leap, its tail lies cloſe to its back; but when it takes its ſpring, the tail moves backwards and forwards from ſide to ſide. This animal at a ſingle bound, will dart from one tree to another at above twenty yards diſtance*, but it ſinks conſiderably before it can reach the place it aims at: ſenſible of this, it mounts the higher in

* Dr. Goldſmith was certainly miſtaken: he ſays about an hundred yards, Mr. Pennant ſays ten yards.

pro-

Flying Squirrel
Lapland Marmot
Casan Marmot

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proportion to the diſtance it intends to reach. It is aſſiſted in this ſpring, by a very peculiar formation of the ſkin or membrane, which extends from the fore feet to the hinder; ſo that when it ſtretches its fore-legs forward, and its hind legs backward, this ſkin is extended between them, ſomewhat like that between the legs of a bat. Thus the little animal keeps buoyant in the air, till the force of its firſt impulſe is expired, and then it deſcends.

The flying ſquirrel, however, does not move like a bird, by repeated ſtrokes of its wings, but rather in the manner of a paper kite, ſupported by the expanſion of the ſurface of its body, which renders it ſpecifically lighter than it would otherwiſe be.

This animal inhabits Finland, Lapland, Poland, Ruſſia, North-America, and New Spain. Like the common ſquirrel, it is uſually found on the tops of trees; but, though better calculated for leaping, it is of a more torpid diſpoſition, and ſeldom exerts its powers; it therefore frequently becomes the prey of the martin and the polecat. It is not, like moſt other ſquirrels, fond of almonds or nuts, its favourite food be-

ing the ſprouts of the birch, and the cones of the pine. Though eaſily tamed, it embraces the firſt opportunity of deſerting. When in its tame ſtate, it is fed with bread and fruits; and generally ſleeps by day, though it is very ſprightly and agile in the night. Theſe animals uſually bring forth three or four young at a time, and live in hollow trees.

THE JERBOA.

THE jerboa has dark full eyes, long whiſkers, and broad erect ears. It is about the ſize of a large rat, and its head ſomewhat reſembles that of a rabbit. It has two cutting teeth in each jaw, and a tail about ten inches long, terminated with a black tuft of hair, the tip of which is white, and the reſt of the tail covered with very ſhort coarſe hair. The head, back, ſides, and thighs are covered with long ſoft hair, aſh-coloured at the bottom, and of a pale tawny at the ends; the breaſt and belly being whitiſh: but the legs of this animal more particularly deſerve our attention; the fore-legs are not above an inch long, having five toes on each,

the

the inner or thumb being hardly viſible; but that, as well as the reſt, is furniſhed with a ſharp claw: the hinder-legs are two inches and a quarter long, covered with ſhort hair, and exactly reſembling thoſe of a bird; there being but three toes, of which that in the middle is the longeſt, and on each of them there is a ſharp claw.

This animal inhabits Egypt, Barbary, Paleſtine, and the deſerts between Balſora and Aleppo. It is as ſingular in its motions as in its form: it always ſtands or walks on its hind legs only, while the fore-paws, like thoſe of a ſquirrel, perform the offices of hands, and convey its food to its mouth. When diſturbed or purſued, they are often ſeen to jump ſix or ſeven feet from the ground, and to move ſo ſwiftly that hardly any other quadruped is able to overtake them. They are a lively inoffenſive race of animals, feeding entirely upon vegetables, and burrowing in the ground like rabbits. In 1770, two of them were ſhewn in London, which burrowed almoſt through the brick wall of the room in which they were kept. Theſe animals are eaten by the Arabs, who call them the lambs of the children

of Iſrael. Bochart diſplays great learning in endeavouring to prove that the jerboa is the *ſaphan* of HOLY WRIT.

Mr. Banks brought home the ſkin of an animal, which he calls the kanguroo, which, from its general outline, and the moſt ſtriking peculiarity of its figure, greatly reſembles the jerboa, yet it entirely differs in ſize, and in many of thoſe minute diſtinctions which point out the general ranks of nature. The kanguroo is often known to weigh above fifty pounds.

THE SIBERIAN JERBOA.

THE ears of this animal are very long, narrow, and tranſparent, and it has long whiſkers: each of the fore-feet has five toes, and each of the hind-feet three pointing forward, and a fourth behind, about an inch above the heel. The upper part of the body is of a tawny colour, and the lower whitiſh. In the form of the body, legs, and tail, it reſembles the laſt. It inhabits Siberia, and, like the former, is very active. It is a more expert digger than even the rabbit itſelf; and when it is purſued, and finds it cannot eſcape by its ſwiftneſs,

neſs, it attempts to make a hole inſtantly in the ground; in which they ſometimes bury themſelves deep enough to find ſecurity before their purſuers come up. In ſome places, their burrows are ſo numerous as to be dangerous to travellers, the horſes frequently ſtumbling in them.

The Siberian jerboa is a provident little animal, and prepares againſt winter. It cuts graſs, and leaves it in little heaps to dry, and afterwards carries it into the burrow, where it not only ſerves for food, but makes the habitation warm for its young during the rigours of winter.

THE TORRID JERBOA.

THIS animal has long whiſkers, naked open ears, and four toes on the fore-feet. The hind-feet, which are as long as the body, are thick, ſtrong, and thinly haired. It has five toes on each foot, but hardly any neck. The tail is about the length of the body, and is very thin of hair. The upper part of the body is of a yellow colour, and the lower white. It is about the ſize of a common mouſe, and, according to

Linnæus, inhabits the Torrid Zone. This animal is not mentioned by any other writer.

THE INDIAN JERBOA.

IT has a ſlender noſe, eyes large and prominent; ears broad, erect, naked, ſemipellucid, and about an inch and an half long, with a tuft of hair between them. It has two ſlender cutting teeth, and two canine teeth in each jaw. Like the ape, it has four long ſlender toes, and a diſtinct thumb on each foot: the claws are ſharp-pointed, but they are all attached to the ſkin, except on the two interior toes of the hind feet. The thumbs of the hind feet are broad, and greatly dilated at their ends; the hair on the legs and feet is ſhort, white, and thinly ſcattered: the tail is almoſt naked, and that part next the body is round and ſcaly like that of a rat. The length of this animal from the noſe to the tail is about ſix inches; and to the hind toes eleven inches and an half. The hair is ſoft, and of an aſh-colour mixed with tawny. It is an inhabitant of India. Dr. Hunter has a ſpecimen of

this animal in his cabinet, which anſwers to this deſcription.

THE COMMON RAT.

IF we look through the different ranks of animals, from the largeſt to the ſmalleſt, from the enormous elephant to the diminutive mouſe, we ſhall diſcover that we ſuffer greater injuries from the contemptible meanneſs of the one, than the formidable invaſions of the other. We can oppoſe united ſtrength and art againſt the elephant, the rhinoceros, or the lion: thoſe we have driven into their native ſolitudes, and compelled them to remain at a diſtance, in the moſt inconvenient regions, and diſagreeable climates. But no force can be exerted againſt their unreſiſting timidity, no arts can diminiſh their aſtoniſhing encreaſe: legions of rats may be deſtroyed in an inſtant, yet the loſs is quickly repaired. Nature, which has denied them ſtrength, has ſupplied the defect by their fecundity.

Of all our ſmaller quadrupeds, the rat is the moſt pernicious. Our meat, corn, paper, cloaths, furniture, and every conveniency of life is a prey to this

this deſtructive animal; and it makes equal havock on our poultry, rabbits, or young game. It is to be lamented that it is a domeſtic animal, always reſiding in houſes, barns, or granaries; and nature has furniſhed it with ſuch very ſtrong fore-teeth, that it can force its way through the hardeſt wood or the oldeſt mortar: it makes an habitation either for its temporary reſidence, or for a neſt for its young, in a hole near a chimney: when it is intended for a neſt, it improves the warmth of it, by forming a magazine of bits of cloth, hay, ſtraw, or wool.

This animal breeds ſeveral times in the year, and uſually brings forth ſix or ſeven young at a time. This ſpecies frequently overſtock their abode by their fecundity, which obliges them, through deficiency of food, to devour each other. Happily for us, this unnatural diſpoſition prevents even the human race from becoming a prey to them; though indeed there are ſome inſtances of their gnawing infants in their ſleep.

The common enemy of the rat is the weaſel, which makes infinitely more deſtruction among them than the cat; the

the weaſel having more agility, and, from the ſlender form of its body, being enabled to purſue them through all their retreats, which the former cannot. The Norway rat has greatly reduced their numbers, and in many places almoſt extirpated them.

Though the common rat is an animal ſo univerſally known, a brief deſcription of it may be excuſed. The length, from the noſe to the tail, is about ſeven inches long, and the tail near eight inches: the noſe, which is ſharp-pointed, is furniſhed with long whiſkers; the colour of the head, and the whole upper-part of the body, is a deep iron-grey, bordering on black; the throat and belly are of a dirty white, inclining to grey; the feet and legs are almoſt naked, and of a dirty pale fleſh colour. The tail is covered with ſmall duſky ſcales, mixed with a few hairs, which adds to the general deformity of its deteſtable figure. The fore-feet want the thumb or interior toe, having only a claw in its place: the hind-feet are furniſhed with five toes.

This animal was firſt introduced into America by the Europeans, and into South-

South-America * about the year 1544, when Blaſco Nunnez was the viceroy: it is now become the peſt of all that continent. It was formerly ſo great a nuiſance that the king of England had a rat-catcher belonging to his houſhold, which is continued in office to this day by his Britannic majeſty; diſtinguiſhed in a peculiar manner by his dreſs, which is ſcarlet, embroidered with yellow worſted, decorated with the figures of mice deſtroying wheat-ſheaves.

* Garcilaſſo de la Vega, 384.

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